ANNUAL PLAN

1970-71

GOVERNMENT OF INDIA.
PLANNING COMMISSION

115320

85
338.91
In2ap
1970/71

CONTENTS

	Page
Introduction	iii
1. Approach	1
2. Plan in Outline	7
3. Financing the Plan	37

PROGRAMMES OF DEVELOPMENT

4. Agriculture	45
5. Animal Husbandry, Dairying, Fisheries and Forests	69
6. Food and Nutrition	79
7. Cooperation and Community Development	87
8. Irrigation and Flood Control	93
9. Power	105
10. Village and Small Industries	121
11. Industry and Minerals	125
12. Transport and Communications	147
13. Education	159
14. Scientific Research and Natural Resources	165
15. Health and Family Planning	175
16. Urban Development, Housing and Water Supply	183
17. Social Welfare	189
18. Welfare of Backward Classes	193
19. Labour and Employment	197
20. Other Programmes	201
Appendix	207

ERRATA

Page	Para/Annexure	Line	For	Read
8	2.4	2	1247.34	1247.33
17	Item 15 & 16	Sign) should be against Irrigation & Flood Control instead of against Cooperation and Community Development.		
35	Item 5	Col.13	53.80	53.89
35	Item 16	Col.13	1794.70	1794.60
37	3.1	3	1960-70	1969-70
46	Table 4.2	Item 8, Column 6.	16.19[1]	16.19[3]
46	Table 4.2	Item 17, Column 2.	3	-
47	Table 4.5	Item No.2, Column 3	7.87	1.87
73	5.16	4	section	sector
96	Table 8.1	Serial No.2, Col.8	1.34	1.24
98	Annexure 8.2	Serial No.5 Col.2: Sign mark	2	1
98	Annexure 8.2	Serial No.12 Col.2: Sign mark	1	2
109	Annexure 9.1	Grand Total Column	6712.20	36712.20
115	Annexure 9.4	Item 10 Mysore, for New schemes	20	26
115	Annexure 9.4	Item 15, Tamil Nadu New Generation Scheme	80	90
118	Annexure 9.6	footnote	60 lakhs	160 lakhs
131	Para 11.20	6	Aluminium	alumina
131	Para 11.21	6	Rs.3.9 crores	Rs.3.97 crores
138	Table 11.3	Item 8	Seramic	Ceramic
146	Annexure 11.2	Item 37(iii)	Polysterene	Polystyrene
149	Table 12.4	Serial No.1 Col.(2)	104.77	104.17
149	Table 12.5	above the table	Members	Numbers
149	Table 12.5	against electric in the last column	55	56
155	Para 12.25	10	'a'	at
179	Table	Table Number	5.4	15.4
179	Table 15.4 total	~~Serial No.6 Col.5~~	5800.00	5200.00
180	15.16	11	1.122	1,122
187	Annexure 16.1	Grand total under Housing-1970-71 outlay	2096.50	2097.00
189	Table 17.1	Rs.crores may be added above the table		
194	18.4	3	matters	-
214	List 1	Item 63	00	3.00
249	List X I...	Item 51 ...rial	Pharmacepecial	Pharmacopocial
181	15.19	2 & 3	The aim is to that all programme personnel are exposed to at least one initial training by the end of 1970-71	The aim is that all programme personnel are to be exposed to at least one initial training by the end of 1970-71.

INTRODUCTION

The Annual Plan for 1970-71, the second year of the Fourth Plan (1969-74), was formulated when the Fourth Plan was being finalised. To subserve the objective of making the annual plan an operative instrument of implementation, the Planning Commission issued more detailed guidelines to the State Governments and Central Ministries in respect of the Plan as a whole as also for specific sectors of development. State Governments and Central Ministries were advised to work out details of programmes, their inter-relationships and administrative measures required to be taken during the year. The quantum of Central assistance due to each State, within the overall estimates of resources for the year, was also indicated sufficiently in advance to enable a more realistic formulation of initial proposals.

2. Early in October 1969, the State Governments and Union Territories were requested to forward their plan proposals by the end of November 1969. During October-November 1969 discussions were held with the representatives of the State Governments for re-assessing their resources in the light of the recommendations of the Fifth Finance Commission. A series of meetings were held with Chief Ministers of States during November-December 1969 to work out the size and content of State Plans. In addition to the discussions held at Delhi, the programme Advisers of the Planning Commission held discussions with the State Governments at the State headquarters. Thereafter, the Programme Advisers prepared their recommendations which formed the basis of final discussions between the Planning Commission and the Chief Ministers.

3. The Central Ministries were also requested in October 1969 to formulate their Annual Plan proposals for 1970-71 and forward them to the Planning Commission by November 1969. These proposals were examined by the Technical Divisions of the Planning Commission. Discussions were thereafter held with the representatives of the Ministries, their Associated Finance and the Ministry of Finance (Expenditure) during December 1969 and January 1970. These discussions formed the basis of the provisions in the Central Budget for 1970-71.

4. The Annual Plan for 1970-71 came into effect on 1st April 1970. The present document gives the details of programmes and schemes under implementation or to be implemented during

the year by the Central Ministries, State Governments and Administrations of the Union Territories. In respect of the Plan for the Centre, the document takes into account the outlays incorporated in the Central Budget for 1970-71. For States and Union Territories the outlays included are those which emerged after discussions with their representatives or are the outlays based on the recommendations made by the Programme Advisers of the Planning Commission. A complete list of Central and Centrally sponsored programmes together with corresponding Plan outlays for the year has been given as an Appendix to this document. The list of State Plan Schemes is, however, partial and confined to important projects in industry, power and irrigation.

CHAPTER I

APPROACH

THE year 1969-70 carried forward the process of economic growth with a fair measure of success in many fields. The production of foodgrains is estimated to have increased to 99.5 million tonnes from 94 million tonnes during 1968-69. The output of some commercial crops, particularly sugarcane and raw jute, also recorded sizeable increases. The rate of growth of industrial production improved further to around 7 per cent from 6.2 per cent achieved in 1968-69 though it fell short of the Annual Plan target of 8 per cent. Exports recorded an increase of 4 per cent and this was considerably below the target of a 7 per cent growth. The growth of real national income is likely to reach the target of 5.5 per cent and the rates of domestic savings and investment approximate to what was envisaged in the Annual Plan 1969-70.

1.2. The principal objectives of the Annual Plan are:—

(1) to increase the rate of investment from 12 per cent in 1969-70 to a little over 13 per cent in 1970-71;

(2) to step up the net investment in the public sector by 25 per cent over the level in 1969-70;

(3) to achieve a rate of growth of 5.5 per cent in national income through an increase of 5 per cent in net output from agriculture and 8 per cent in organised industry;

(4) to stabilise the general price level through increased production of foodgrains and other agricultural raw materials and through appropriate management of their supplies; and

(5) to bring about an expansion of 7 per cent in exports through an active policy of export promotion.

Investment and Savings

1.3. The rate of investment which had remained at 11.3 per cent in 1967-68 and 1968-69 is estimated to have risen to 12 per cent in 1969-70. The Annual Plan for 1970-71 aims at raising it further to a little over 13 per cent. The proportion of external

assistance (net of debt repayment) to national income which declined from 3.5 per cent in 1967-68 to 2.5 per cent in 1968-69 and further to 2.1 per cent in the following year, is estimated to decline further to 1.8 per cent in 1970-71. There is, therefore, need for a sharper step up in the rate of domestic savings from 9.9 per cent in 1969-70 to over 11.2 per cent in 1970-71.

Agricultural Production

1.4. The Annual Plan for 1970-71 envisages a 5.5 per cent growth in gross agricultural output. The production of foodgrains is to be stepped up to 106 million tonnes, of oilseeds to 9 million tonnes, and of cotton and jute to 6.5 and 6.7 million bales respectively. To attain these levels, the area under high yielding varieties is to be extended to 15.05 million hectares and an additional area of 2.24 million hectares will be covered under the multiple cropping programme. The coverage of area under the package schemes in case of commercial crops, aiming at improving per hectare yields, will be further extended. Various promotional measures have been taken to step up the consumption of chemical fertilisers as also for their balanced use. Institutional facilities for agricultural credit are being expanded through the strengthening of cooperatives and other institutions and increased participation of nationalised commercial banks in financing agriculture.

Industrial Production

1.5. Industrial production recorded an increase of around 7 per cent during 1969-70 against 6.2 per cent during 1968-69. Recessionary conditions in most of the industries lifted and improvement occurred in the performance of a wide range of consumer and intermediate industries. Larger availability of raw materials including those from agriculture, liberalised import policy, increase in domestic demand due to larger incomes, sustained rise in export demand and liberal credit facilities contributed to this recovery.

1.6. In 1970-71 industrial production is expected to increase further on account of a rise in agricultural incomes, increased public investment activity, better climate for investment in the private corporate sector and rise in demand for industrial exports. Industrial licensing policy has also been oriented to help industrial growth. Exemption limit for licensing has been raised to Rs. 1 crore, except in certain cases. The import policy for 1970-71 would facilitate the supply of imported raw materials and components particularly for the export-oriented and priority industries. The Annual Plan envisages expansion of capacities and production in a number of important industries. Production of steel is proposed to be stepped up. A programme of improvement and

renovation of Hindustan Steel has been initiated to augment the supply of steel. The production of fertilisers is to be raised. As a result of increase in demand for machinery and equipment the capacity utilisation is expected to improve both in the public and private sectors. On the whole, industrial production is likely to increase by 8 per cent in 1970-71.

Prices

1.7. A mild pressure on prices emerged during 1969-70 on account of fall in agricultrural production during 1968-69 and faster growth in aggregate demand in 1969-70. While the average level of prices in the first seven months of the year was only 2.5 per cent higher as compared to the corresponding period of the previous year, the average level of prices during the remaining five months was higher by 5.3 per cent. The average index of wholesale prices for 1969-70 at 171.5 was higher by 3.7 per cent over the preceding year. It was, however, higher by only 2.6 per cent over that for 1967-68. The rise in wholesale prices during 1969-70 was primarily due to the rise in the index of industrial raw materials, chemicals, and manufactures which went up by 14.5, 8.6 and 8.1 per cent respectively. The increase in foodgrain prices during the year was only 3 per cent. Among industrial raw materials, the rise in the prices of oilseeds and cotton was due to the downward revision in their estimates of production and inadequacy of supplies. A part of the increase in the prices of chemicals and manufactures is attributable to the adjustments made in the rates of excise duty on petroleum products and synthetic yarn as also to the price increases allowed by Government in respect of coal, cement and steel.

1.8. As for price prospects in 1970-71, the increases in agricultural and industrial outputs envisaged in the Annual Plan are likely to have a salutary effect on prices. The stock of foodgrains with the public authorities amounted to 4.2 million tonnes at the beginning of 1970-71. With further addition to stock from the rabi crop it should be possible to operate on these stocks to maintain stability in foodgrain prices. Buffer stock operations in jute will be continued. A Cotton Corporation has been set up for the purchase, sale and equitable distribution of domestic cotton and also for canalisation of cotton imports. Monetary and fiscal policies will also be geared towards the objective of price stability.

Foreign Trade

1.9. The performance of exports in 1969-70 fell short of the expectations. Compared to the preceding year, the value of

exports rose by only 4.1 per cent to a level of Rs. 1413 crores. This slow growth in exports is attributable to a number of factors, internal and external. Internally, exports of certain categories, such as steel and engineering goods were adversely affected by domestic shortages of various types of steel and non-ferrous metals owing to the pressure of domestic demand and abnormal factors such as strikes. Among external factors, mention may be made of restrictive import policies pursued by a number of developed countries, especially the UK. Various measures were taken to overcome the obstacles faced by exporters and the performance of exports improved during the last quarter.

1.10. A number of steps were taken in the Central budget for 1970-71 in order to accelerate the growth of exports. Export duty on tea was abolished and that on certain varieties of jute manufactures reduced. The import policy for 1970-71 has been further adapted to promote exports and production for exports. The State Trading Corporation and the Minerals and Metals Trading Corporation are organising bulk imports of raw materials for supply "off-the-shelf" and an Industrial Raw Materials Assistance Centre is being set up to organise this supply.

1.11. While exports registered a small increase, the declining trend in imports which had set in from 1966-67 became more pronounced during the year. Imports amounted to only Rs. 1568 crores as compared to Rs. 1909 crores in 1968-69 and Rs. 2008 crores in 1967-68. The decline in aggregate imports during 1969-70 was of the order of 18 per cent as compared to about 5 per cent during 1968-69. Good agricultural performance resulting in improved availability of foodgrains enabled a further reduction in foodgrains imports. As against an increase of 5.5 per cent in non-food imports during 1968-69 the level of these imports during 1969-70 registered a decline of about 17 per cent. The decline in non-food imports was mainly due to lower imports of fertilisers, machinery and transport equipment. This is a significant development in the background of an increase of about 7 per cent in industrial production during the year. Under the import policy for 1969-70, imports of 316 items or groups of items were banned as these could be produced domestically. The sharp reduction in aggregate imports together with the small increase in exports brought about a marked improvement in the trade balance. The trade deficit of Rs. 550 crores recorded in 1968-69 declined to Rs. 154 crores in 1969-70. This improvement in the trade balance together with a slightly higher utilisation of external aid resulted in a further accretion of Rs. 152 crores to the foreign exchange reserves, despite larger payments on account of debt servicing and repayments to the International Moneytary Fund.

1.12. The import policy for 1970-71 has banned 159 items or groups of items and has restricted imports of a further 56 items. These cover certain types of ball bearings, small tools, machine tools, electrical instruments, textile machinery accessories, drugs, medicines and chemicals. With the acceleration of growth in industrial production during the year, further progress in import saving and substitution is expected.

Social Justice

1.13. A number of institutional and policy measures were initiated during 1969-70 to promote the social objectives envisaged in the Fourth Plan. The Monopolies and Restrictive Trade Practices legislation was enacted to help check the growth of concentration of economic power. Nationalisation of 14 major commercial banks enabled the Government for the first time to acquire control of a sizeable portion of organised credit and direct it to more socially desirable channels. The credit policies of the nationalised commercial banks, financial institutions and cooperatives have been oriented in favour of the small borrowers. Industrial licensing policy has been modified to restrain the growth of big business and provide encouragement to new and small entrepreneurs. Two small farmers' development agencies were setup —one in Bihar and the other in West Bengal in 1969-70. The State Bank initiated schemes to provide credit for the establishment of small scale industries and to impart training to engineer entrepreneurs for starting small scale industries.

1.14. The Annual Plan for 1970-71 has been framed with special emphasis on programmes and schemes meant to increase the income and employment opportunities for the weaker sections and to promote greater social and economic equality. It is expected that work on all the projects included in the Fourth Plan for small farmers, sub-marginal cultivators and agricultural labourers will be initiated during the year. Work will be initiated on nine projects for the development of dry areas. The programme of rural works with labour intensive schemes will also be taken up in the chronically drought-affected areas. The funds of financial institutions and cooperatives will be increasingly used to support small producers in agriculture and industry. Steps are being taken to create greater employment potential, especially in the rural areas, by promoting labour intensive schemes. The increasing tempo of agricultural development itself will create new employment opportunities in the rural areas, besides providing fuller employment to those engaged in agriculture.

1.15. A special programme of providing nutritional services to pre-school children in tribal blocks and slum areas of the metropolitan cities is proposed to be taken up. Increased funds have been provided to finance low and middle-class housing and for the improvement of slums. A Housing and Urban Development Finance Corporation has been set up to supplement the Plan Schemes. A substantially higher provision than that in the previous year has been made for expansion of drinking water facilities in rural areas. Fiscal measures have been taken in the Union Budget for 1970-71 with a view to reducing disparities in income and wealth. Income tax rates for higher income groups have been enhanced. The exemption limit for gift tax has been reduced. The rates of gift tax have been revised to reduce opportunities for avoidance of estate duty. Wealth tax and basic rates and additional rates for urban property have been raised to discourage large holdings of urban property. Excise duties have been increased in case of some of the non-essential commodities which enter into the consumption of the more prosperous classes.

CHAPTER 2

PLAN IN OUTLINE

THE Annual Plan for 1970-71 has been formulated within the framework of the finalised Fourth Five Year Plan (1969-74). In formulating the Plan for the year, critical appraisal was made of the progress of Plan and non-Plan development schemes in terms of expenditure, physical achievements and their impact on the economy with a view to arriving at definite conclusions regarding their continuation, enlargement, implementation and re-orientation. Detailed studies of the utilisation of existing capacities or potentials including assessment of the needs of continuing irrigation and power projects, were also undertaken to evolve supporting programmes for their fuller utilisation and, if under construction, for their expeditious completion. In estimating the resources likely to be available for the Plan during the year, assessment has been made of both the possible order of budgetary support and the prospects of drawal on the banking and financial institutions for supplementary resources.

Plan Outlay

2.2. The Annual Plan for 1970-71 provides an outlay of Rs. 2822.20 crores in the public sector as against an outlay of Rs. 2270.47 crores in the Annual Plan for 1969-70. The outlay in the second year of the Fourth Plan accounts for 17.7 per cent of the total public sector outlay as compared to 14.3 per cent in the first year of the Plan, reflecting an increase in outlay of about 12.4 per cent over the first year of the Fourth Plan. The figures of Plan outlay for the two years are inclusive of funds available from financial institutions for programmes included in the public sector. The Plan outlay for 1970-71 in respect of the Centre, States and Union Territories, together with the corresponding outlay for 1969-70, is given in table 2.1.

TABLE 2.1: *Plan outlay by Centre, States and Union Territories, for* 1969-70 *and* 1970-71.

(Rs. crores)

	1969-70	1970-71
Centre	1173.84	1456.09
Centrally sponsored	99.00	118.78
States	932.01	1168.59
Union Territories	65.62	78.74
total	2270.47	2822.20

2.3. The increase in the Central sector in 1970-71 over 1969-70 Plan is of the order of Rs. 302 crores, in the Union Territories of Rs. 13 crores and in the States sector of about Rs. 237 crores. The increase in the States outlay is wholly on account of the additional resources to be generated by the States themselves—a marginal increase of Rs. 10 crores has been made in Central assistance.

2.4. Plan outlay of the States and Union Territories for 1970-71 is Rs. 1247.34 crores. Plan outlay in respect of individual States along with the amount of Central assistance to be provided to them during 1970-71 is given in table 2.2. The outlay for Union Territories is given in table 2.3.

TABLE 2.2: *Plan Outlay for* 1970-71: *States*

(Rs. lakhs)

sl. no.	state	central assistance	total plan outlay
(0)	(1)	(2)	(3)
1.	Andhra Pradesh	4350	8006
2.	Assam	3994	4809
3.	Bihar	6134	8569
4.	Gujarat	2864	8600
5.	Haryana	1423	4000
6.	Jammu and Kashmir	2629	2934
7.	Kerala	3175	4600
8.	Madhya Pradesh	4756	6720
9.	Maharashtra	4451	15672
10.	Mysore	3137	6500
11.	Nagaland	635	776
12.	Orissa	2902	4184
13.	Punjab	1835	4987
14.	Rajasthan	3994	5386
15.	Tamil Nadu	3664	7930
16.	Uttar Pradesh	9544	17919
17.	West Bengal	4007	5267
	total	**63500**	**116859**

TABLE 2.3: *Plan Outlay for* 1970-71: *Union Territories*

(Rs. lakhs)

sl. no.	union territory	plan outlay
1.	Anadaman and Nicobar Islands	309
2.	Chandigarh	175
3.	Dadra and Nagar Haveli	46
4.	Delhi	2867
5.	Goa, Daman and Diu	742
6.	Himachal Pradesh	1705
7.	Laccadive, Amindivi and Minicoy Islands	45
8.	Manipur	519
9.	NEFA	385
10.	Pondicherry	264
11.	Tripura	817
	total	7874

2.5. The distribution of Plan outlay for 1970-71 by major heads of development along with the corresponding Plan outlay for 1969-70 are given in table 2.4. The distribution of Plan outlay for 1970-71 and for 1969-70 by various heads and sub-heads of development for the Central or Centrally sponsored schemes, States and Union Territories are given in Annexure 2.1. The outlays for 1970-71 by major heads and sub-heads of development for different States and Union Territories are given in Annexures 2.2 and 2.3 respectively.

TABLE 2.4: *Plan Outlays for* 1970-71 *and* 1969-70 *by Major Heads of Development*

(Rs. crores)

sl. no.	head of development	1969-70	1970-71
(0)	(1)	(2)	(3)
1.	agriculture and allied programmes	332.16	470.89
2.	irrigation and flood control	155.55	203.45
3.	power	367.12	482.41
4.	industry and minerals	579.61	622.33
5.	village and small industries	38.48	43.44
6.	transport and communications	447.65	556.00
7.	education	96.80	123.13

(0)	(1)	(2)	(3)
8.	scientific research	21.60	23.61
9.	health	55.31	63.45
10.	family planning	41.90	52.00
11.	water supply and sanitation	45.73	63.50
12.	housing and urban development	24.16	42.49
13.	welfare of backward classes	19.25	21.64
14.	social welfare†	4.44	5.45
15.	labour welfare and craftsmen training	6.34	6.90
16.	other programmes	34.37	41.51
	total	**2270.47**	**2822.20**

†Including public cooperation.

2.6. Table 2.5 gives the anticipated physical achievements and targets set for 1970-71 as also the targets and achievements for 1969-70.

TABLE 2.5: *Selected Physical Targets and Achievements*

sl. no.	item	unit	1969-70 target	1969-70 estimated achievement	1970-71 target
(0)	(1)	(2)	(3)	(4)	(5)
agriculture and allied programmes					
1.	foodgrains	mill. tonnes	101.0	99.5	106.0
2.	oilseeds	,,	8.5	7.6	9.0
3.	sugarcane (gur)	,,	12.5	13.4	13.2
4.	cotton	mill. bales	6.0	5.2	6.5
5.	jute	,,	6.4	5.6	6.7
6.	high yielding varieties programmes	mill. hectares	10.92	11.07	15.05
7.	multiple cropping (additional)	,,	7.87	N.A.	2.24
8.	minor irrigation (additional)	,,	1.40	1.49	1.76
9.	soil conservation on agricultural land (additional)	,,	0.87	0.92	1.20
Consumption of chemical fertilisers					
10.	nitrogenous (in terms of N)	mill. tonnes	1.70	1.42	1.73

(0)	(1)	(2)	(3)	(4)	(5)
11.	phosphatic (in terms of P_2O_5)	mill. tonnes	0.60	0.43	0.56
12.	potassic (in terms of K_2O)	„	0.30	0.17	0.25
13.	urban compost	„	4.44	4.20	4.75
14.	green manuring	mill. hectares	9.56	7.65	8.65
15.	plant protection	„	76.00	33.88	42.32
	Cooperation:				
16.	short and medium term loans advanced	Rs. crores	500	520	565
	irrigation (major and medium)				
17.	potential (gross)	mill. hectares	19.47	19.37	20.01
18.	utilisation (gross)	„	17.64	17.50	18.14
	power				
19.	installed capacity	mill. kW	15.9	15.5	16.8
20.	pump sets energised	'000 nos.	1181	1349	1609
	industry and minerals				
21.	steel ingots	mill. tonnes	7.5	6.4	7.6
22.	finished steel	„	5.5	4.8	5.7
23.	alloy and special steel	000 tonnes	85.0	140.4	170.0
24.	aluminium	„	145.0	135.0	170.0
25.	copper	„	9.5	9.6	9.6
26.	zinc	„	32.0	23.7	28.0
27.	metallurgical and other heavy equipment machinery	„	30.0	18.0	22.0
28.	agricultural tractors	000 nos.	20.0	18.0	25.0
29.	turbines—thermal	mill. kW	0.8	0.5	0.7
30.	turbines—hydro	„	0.25	0.38	0.50
31.	nitrogenous fertilizers (in terms of N)	000 tonnes	900.0	715.6	940.0
32.	phosphatic fertilizers (in terms of P_2O_5)	„	340.0	221.5	300.0
33.	sulphuric acid	„	1200	1200	1300
34.	coking coal	mill. tonnes	N.F.	17.0	17.0
35.	iron ore including pelletisation	„	30.0	28.0	32.0
36.	production of crude petroleum	„	7.3	6.7	7.1
37.	refining capacity in terms of crude throughout	„	18.0	18.0	18.0
38.	machine tools (organised sector)	Rs. million	325	272	350

N.F. = not fixed.

(0)	(1)	(2)	(3)	(4)	(5)
39.	ball and roller bearings	mill. nos	14.0	14.0	16.0
40.	power driven pumps (organised sector)	000 nos.	350	375	400
41.	diesel engines (stationary) (organised sector)	,,	125	143	150
42.	commercial vehicles	000 nos.	40.0	35.4	48.0
43.	electric transformers above 33 KV	mill. KV	4.5	3.2	5.0
44.	electric transformers 33 KV and below	,,	4.0	3.5	5.0
45.	electric motors above 200 HP	mill. HP	0.5	0.25	0.5
46.	electric motors 200 HP and below	,,	2.2	2.2	2.4
47.	paper and paper board	000 tonnes	650.0	706.0	750.0
48.	cement	mill. tonnes	13.5	13.6	14.5
49.	cotton (mill sector)	mill. metres	4500	4250	4350
50.	jute textiles	000 tonnes	1150	1100	1250
51.	sugar	,,	3700	4300	4200
	village and small industries				
52.	productiom of handloom, power-loon and khadi cloth	mill. metres	3500	3750	3900
53.	raw silk	mill. kgs.	2.40	2.30	2.50
	transport and communications				
54.	railways: traffic orginating	mill. tonnes	214.0	208.8	217.1
55.	major ports: traffic handled	,,	59.0	55.0	60.0
56.	shipping tonnage	mill. grt.	2.40	2.34	2.94[1]
	education				
	additional enrolment in classes:				
57.	I—V	million	2.17	2.17	3.09
58.	VI—VIII	,,	0.94	0.94	1.41
59.	IX—XI	,,	0.53	0.53	0.73
60.	university education (arts, science and commerce courses)	millions	0.175	0.175	0.200
	health				
61.	hospitals beds	thousand nos	261	261	266
	family planning				
62.	sterilisation	mill. nos.	3.24	1.38	2.6
63.	IUCD insertions	,,	1.62	0.44	0.9

[1]includes acquisition of about 6 lakh GRT orders for which are likely to be placed during 1970-71.

ANNEXURE 2.1

Plan Outlay for 1970-71 *and* 1969-70 *by Heads and Sub-Heads of Development*

(Rs. lakhs)

sl. no.	head of development	1969-70					1970-71				
		centre	centrally sponsored	states	union territories	Total	centre	centrally sponsored	states	union territories	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	agricultural production	1428	409	4812	345	6994	1981	591	5075	377	8024
2.	minor irrigation	200	..	7868	124	8192	242	..	8849	124	9209
3.	soil conservation	6	236	1760	85	2087	2	338	2335	84	2759
4.	area development	150	..	304	neg.	454	180	..	392	..	572
5.	animal husbandry	63	13	958	78	1112	90	33	1102	100	1325
6.	dairying and milk supply	65	..	693	67	825	856[1]	..	709	54	1619
7.	fisheries	353	151	638	86	1228	382	150	773	89	1394
8.	forests	71	70	1008	164	1313	58	20	1303	194	1575
9.	warehousing, marketing and storage	1157	..	80	11	1248	1534	40	90	12	1676
10.	food processing and subsidiary foods	98	15	..	..	113	211	14	..	..	225

[1]includes Rs. 7.81 crores for Indian Dairy Corporation.

ANNEXURE 2.1—*Contd.*

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
11.	central support to financial institutions (agricultural sector)	3215	..	..	..	3215	5595	..	..	..	5595
12.	buffer stocks	2500	..	..	..	2500	6500	..	..	..	6500
13.	cooperation	267	304	1148	68	1787	1858	501	1741	91	4191
14.	community development	100	219	1579	114	2012	72	204	1927	108	2311
15.	panchayats	1	..	120	16	136	1	..	96	18	114
16.	agriculture and allied programmes	9673	1417	20968	1158	33216	19561	1891	24386	1251	47089
17.	irrigation	212	..	14010	20	14242	300	..	17771	13	18084
18.	flood control	31	..	1134	148	1313	217	..	1863	181	2261
19.	power	4492	300	30965	1555	36712	8363	500	37583	1795	48241
20.	irrigation and power	4735	300	45509	1723	52267	8880	500	57217	1989	68586
21.	Organised industries	54827	..	2681	64	57961	58668	..	3022	705	62233
22.	mineral development			383	6				468		
23.	village and small industries	2064	122	1529	133	3848	2251	124	1787	182	4344
24.	industry and minerals	56891	122	4593	203	61809	60919	124	5277	257	66577
25.	railways	16000	..	..	..	16000	18000	..	..	..	18000
26.	roads	3246	295	4806	1170	9517	4160	284	6495	1341	12280
27.	road tarnsport	35	..	1098	221	1354	47	..	1316	256	1619
28.	ports and harbours	2749	100	149	28	3026	4200	160	193	58	4611
29.	shipping	2062	..	..	20	2082	2362	..	..	17	2379
30.	inland water transport	65	31	16	29	141	191	52	26	30	299

31. lighthouses	106	neg.	..	..	106	101	..	..	..	101
32. civil air transport and air corporations	3462	..	8	17	3487	4648	..	13	9	4670
33. tourism	617	..	129	19	765	537	..	199	23	759
34. posts and telegraphs	5700	..	..	..	5700	8300	..	..	..	8300
35. other communications	475	..	..	..	475	300	..	..	..	300
36. broadcasting	312	..	..	..	312	382	..	..	..	382
37. farakka barrage	1800	..	..	..	1800	1900	..	..	..	1900
38. transport and communications	36629	426	6206	1504	44765	45128	496	8242	1734	55600
39. general education and cultural programmes	2474	264	4281	544	7563	3486	215	5664	755	10120
40. technical education	825	453	762	77	2117	868	424	811	90	2193
41. scientific research	2160	..	..	..	2160	2361	..	..	..	2361
42. health	636	2277	2358	260	5531	741	2537	2719	348	6345
43. family planning	720	3470	..	..	4190	581	4619	..	..	5200
44. water supply	5	37	4052	479	4573	3	40	5598	709	6350
45. housing	653	..	677	299	1629	934	..	1901	196	3031
46. urban development	16	..	765	6	787	16	..	1002[2]	200	1218
47. welfare of backward classes	..	1076	790	59	1925	..	991	1087	86	2164
48. social welfare	282	38	110	14	444	344	41	1384[3]	22	543
49. labour welfare and craftsmen training	170	..	428	36	634	173	..	471	46	690
50. social services	7941	7615	14223	1774	31553	9507	8867	19391	2452	40217

[1]included under Community Development.

[2]includes Rs. 677 lakhs for Calcutta Metropolitan Planning Corporation.

[3]includes Rs. 2 lakhs for Public Cooperation.

ANNEXURE 2.1—Concld.

(0) (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
51. rehabilitation	1249	..	..	..	1249	1254	..	..	..	1254
52. department of Statistics	53	..	38	9	100	73	..	53	10	136
53. registrar General's Office	26	..	..	..	26	67	..	..	..	67
54. statistics	79	..	38	9	126	140	..	53	10	203
55. information and publicity	47	..	82	27	156	83	..	83	33	199
56. state capital projects	..	..	565	100	665	..	..	661	77	738
57. special and backward areas	..	..	525	..	525	..	..	965	..	965
58. evaluation machinery	..	..	13	1	14	..	..	16	2	18
59. expansion of printing capacity	122	..	..	..	122	124	..	..	..	124
60. research programmes committee	17	..	..	..	17	11	..	..	..	11
61. miscellaneous	1	20	479	63	563	2	..	568	69	639
62. other programmes	1515	20	1702	200	3437	1614	..	2346	191	4151
63. **grand total**	**117384**	**9900**	**93201**	**6562**	**227047**	**145609**	**11878**	**116859**	**7874**	**282220**

ANNEXURE 2.2

Plan Outlay for 1970-71—*States*

(Rs. lakhs)

Sl. No.	head of development	Andhra Pradesh	Assam	Bihar
(0)	(1)	(2)	(3)	(4)
1.	agricultural production	137	355	337
2.	minor irrigation	530	276	750
3.	soil conservation	88	77	50
4.	area development	159	5	20
5.	animal husbandry	19	99	50
6.	dairying and milk supply	55	24	60
7.	forests	42	80	66
8.	fisheries	30	33	30
9.	warehousing and marketing	3	2	12
10.	I. *agricultural programmes*	**1063**	**951**	**1375**
11.	cooperation	61	101	97
12.	community development	170	89	254
13.	panchayats	..	11	5
14.	II. *cooperation and community development*	**231**	**201**	**356**
15.	irrigation	1995	151	2068
16.	flood control		513	220
17.	power	3457	789	2310
18.	III. *Irrigation and power*	**5452**	**1453**	**4598**
19.	large and medium industries	222	244	161
20.	mineral development	11	16	63
21.	village and small industries	95	119	98
22.	IV. *industry and mining*	**328**	**379**	**322**
23.	roads	240	646	536
24.	road transport		121	60
25.	ports and harbours	10	..	..
26.	inland water transport	..	14	..
27.	civil aviation	..	..	..
28.	tourism	1	9	2
29.	V. *transport and communications*	**251**	**790**	**598**
30.	general education	206	363	454
31.	technical education	26	42	36
32.	cultural programmes	..	..	..
33.	health	90	193	263

(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)
34.	water supply	218	135	297
35.	housing	80	21	124
36.	urban development		48	15
37.	welfare of backward classes	45	95	78
38.	social welfare	2	12	1
39.	labour and labour welfare	10	20	43
40.	public cooperation	..	..	1
41.	VI. *social services*	**677**	**929**	**1312**
42.	statistics	2	3	2
43.	information and publicity	2	13	5
44.	state capital projects	..	..	..
45.	special and backward areas	..	..	..
46.	evaluation machinery	..	1	1
47.	others	..	89	..
48.	VII. *miscellaneous*	**4**	**106**	**8**
49.	**grand total**	**8006**	**4809**	**8569**

ANNEXURE 2.2—*Contd.*

(Rs. lakhs)

Sl. No.	head of development	Gujarat	Haryana	J & K
(0)	(1)	(5)	(6)	(7)
1.	agricultural production	242	195	210
2.	minor irrigation	545	121	114
3.	social conservation	153	28	40
4.	area development	..	1	..
5.	animal husbandry	116	50	82
6.	dairying and milk supply	33	61	17
7.	forests	55	25	40
8.	fisheries	73	5	5
9.	warehousing and marketing	8	..	..
10.	I. *agricultural programmes*	**1225**	**486**	**508**
11.	cooperation	90	78	33
12.	community development	96	13	21
13.	panchayats	4	..	5
14.	II. *cooperation and community development*	**190**	**91**	**59**
15.	irrigation	2184	580	76
16.	flood control	42	160	115
17.	power	2200	1473	842
18.	III. *irrigation and power*	**4426**	**2213**	**1033**
19.	large and medium industries	200	21	90
20.	mineral development	80	2	45
21.	village and small industries	54	67	70
22.	IV. *industry and mining*	**334**	**90**	**205**
23.	roads	391	302	425
24.	road transport	125	126	65
25.	ports and harbours	80	..	..
26.	inland water transport	..	..	..
27.	civil aviation	..	4	..
28.	tourism	5	10	70
29.	V. *transport and communications*	**601**	**442**	**560**
30.	general education	334	262	114
31.	technical education	30	37	16
32.	cultural programmes	7	..	..
33.	health	135	110	68

(Rs. lakhs)

(0)	(1)	(5)	(6)	(7)
34.	water supply	300	140	145
35.	housing	101	55	60
36.	urban development	8		16
37.	welfare of backward classes	75	31	10
38.	social welfare	8	5	5
39.	labour and labour welfare	27	17	6
40.	public cooperation	..	..	..
41.	VI. *social services*	1025	657	440
42.	statistics	2	3	3
43.	information and publicity	8	5	2
44.	state capital projects	525	..	..
45.	special and backward areas	264	..	115
46.	evaluation machinery	..	..	1
47.	others	..	13	8
48.	VII. *miscellaneous*	799	21	129
49.	grand total	8600	4000	2934

ANNEXURE 2.2—Contd.

(Rs. lakhs)

Sl. No.	head of development	Kerala	Madhya Pradesh	Maharashtra
(0)	(1)	(8)	(9)	(10)
1.	agricultural production	281	270	541
2.	minor irrigation	200	717	1100
3.	soil conservation	50	320	819
4.	area development	..	2	70
5.	animal husbandry	60	95	70
6.	dairying and milk supply	15	30	190
7.	forests	75	150	196
8.	fisheries	147	30	80
9.	warehousing and marketing	2	9	15
10.	I. *agricultural programmes*	**830**	**1623**	**3021**
11.	cooperation	52	280	308
12.	community development	75	105	357
13.	panchayats	15	10	
14.	II. *cooperation and community development*	**142**	**395**	**665**
15.	irrigation	450	1050	2680
16.	flood control	70	5	20
17.	power	1530	1550	4800
18.	III. *irrigation and power*	**2050**	**2605**	**7500**
19.	large and medium industries	227	109	249
20.	mineral development	1	20	10
21.	village and small industries	161	66	117
22.	IV. *industry and mining*	**389**	**195**	**376**
23.	roads	275	470	925
24.	road transport	60	50	284
25.	ports and harbours	10	..	77
26.	inland water transport	10	..	..
27.	civil aviation	..	..	3
28.	tourism	10	4	29
29.	V. *transport and communications*	**365**	**524**	**1318**
30.	general education	332	241	658
31.	technical education	34	75	100
32.	cultural programmes	..	..	..
33.	health	120	215	131

(Rs. lakhs)

(0)	(1)	(8)	(9)	(10)
34.	water supply	160	350	1350
35.	housing	83	130	290
36.	urban development	25	10	150
37.	welfare of backward classes	20	200	54
38.	social welfare	3	8	15
39.	labour and labour welfare	39	21	33
40.	public cooperation	..	--	--
41.	VI. *social services*	816	1250	2781
42.	statistics	2	2	4
43.	information and publicity	2	2	6
44.	state capital projects	..	110	..
45.	special and backward areas	..	4	..
46.	evaluation machinery	1	2	..
47.	others	3	8	1
48.	VII. *miscellaneous*	8	128	11
49.	grand total	4600	6720	15672

ANNEXURE 2.2—Contd.

(Rs. lakhs)

Sl. No.	head of development	Mysore	Nagaland	Orissa
(0)	(1)	(11)	(12)	(13)
1.	agricultural production	309	41	259
2.	minor irrigation	718	13	200
3.	soil conservation	168	14	22
4.	area development	50	..	8
5.	animal husbandry	56	21	52
6.	dairying and milk supply	61		11
7.	forests	100	18	50
8.	fisheries	80	5	30
9.	warehousing and marketing	14	..	2
10.	I. *agricultural programmes*	**1556**	**112**	**634**
11.	cooperation	125	11	70
12.	community development	20	21	64
13.	panchayats	..	5	4
14.	II. *cooperation and community development*	**145**	**37**	**138**
15.	irrigation	1120	..	457
16.	flood control	20	..	25
17.	power	1595	59	1660
18.	III. *irrigation and power*	**2735**	**59**	**2142**
19.	large and medium industries	100	155	250
20.	mineral development	5	6	110
21.	village and small industries	69	15	44
22.	IV. *industry and mining*	**174**	**176**	**404**
23.	roads	300	157	175
24.	road transport	..	25	19[a]
25.	ports and harbours	15	..	1
26.	inland water transport	..	..	..
27.	civil aviation	..	..	..
28.	tourism	5	5	7
29.	V. *transport and communications*	**320**	**187**	**202**
30.	general education	300	69	187
31.	technical education	50	6	15
32.	cultural programmes	1	4	8
33.	health	150	32	131

(Rs. lakhs)

(0)	(1)	(11)	(12)	(13)
34.	water supply	500	58	92
35.	housing	100	10	87
36.	urban development		15	7
37.	welfare of backward classes	68	..	75
38.	social welfare	10	3	4
39.	labour and labour welfare	34	..	13
40.	public cooperation	..	neg.	neg.
41.	VI. *social services*	1212	197	619
42.	statistics	4	2	9
43.	information and publicity	11	5	4
44.	state capital projects	..	..	26
45.	special and backward areas	..	..	..
46.	evaluation machinery	1	1	neg.
47.	others	342[3]	..	6
48.	VII. *miscellaneous*	358	8	45
49.	**grand total**	6500	776	4184

[1]included under general education.
[2]includes Rs. 4 lakhs for ore transport.
[3]includes Rs. 335 lakhs unallocated amount.

ANNEXURE 2.2—*Contd.*

(Rs. lakhs)

Sl. No.	head of development	Punjab	Rajasthan	Tamil Nadu
(0)	(1)	(14)	(15)	(16)
1.	agricultural production	161	70	303
2.	minor irrigation	350	285	499
3.	soil conservation	48	46	60
4.	area development	1	13	54
5.	animal husbandry	63	43	32
6.	dairying and milk supply	36	7	45
7.	forests	46	44	78
8.	fisheries	7	8	137
9.	warehousing and marketing	..	2	11
10.	I. *agricultural programmes*	**712**	**468**	**1219**
11.	cooperation	100	61	124
12.	community development	40	65	229
13.	panchayats	7	8	..
14.	II. *cooperation and community development*	**147**	**134**	**353**
15.	irrigation	341	1747	485
16.	flood control	220	33	13
17.	power	2159	1750	2800
18.	III. *irrigation and power*	**2720**	**3530**	**3298**
19.	large and medium industries	89	70	250
20.	mineral development	2	70	10
21.	village and small industries	134	13	286
22.	IV. *industry and mining*	**225**	**153**	**546**
23.	roads	375	105	253
24.	road transport	123	10	138
25.	ports and harbours	..	..	..
26.	inland water transport	..	..	..
27.	civil aviation	6	..	..
28.	tourism	3	9	3
29.	V. *transport and communications*	**507**	**124**	**394**
30.	general education	225	273	544
31.	technical education	12	9	93
32.	cultural programmes	..	..	10
33.	health	120	96	243

(Rs. lakhs)

(0)	(1)	(14)	(15)	(16)
34.	water supply	145	424	739
35.	housing	100	97	250
36.	urban development			29
37.	welfare of backward classes	30	52	125
38.	social welfare	6	5	16
39.	labour and labour welfare	24	8	21
40.	public cooperation	..	neg.	1
41.	VI. *social services*	662	964	2071
42.	statistics	4	2	3
43.	information and publicity	6	4	..
44.	state capital projects	..	..	..
45.	special and backward areas	..	..	45
46.	evaluation machinery	4	2	1
47.	others		5	..
48.	VII. *miscellaneous*	14	13	49
49.	**grand total**	4987	5386	7930

ANNEXURE 2.2—Contd.

(Rs. lakhs)

sl. no.	head of development	Uttar Pradesh	West Bengal	Total
(0)	(1)	(17)	(18)	(19)
1.	agricultural production	1072	292	5075
2.	minor irrigation	1900	575	8843
3.	soil conservation	327	25	2335
4.	area of development	..	9	392
5.	animal husbandry	105	89	1102
6.	dairying and milk supply	65	59	709
7.	forests	200	38	1303
8.	fisheries	20	53	773
9.	warehousing and marketing	..	10	90
10.	I. *agricultural programmes*	**3689**	**1150**	**20622**
11	cooperation	85	65	1741
12.	community development	223		1927
13.	panchayats	22	85	86
14.	II. *cooperation and community development*	**330**	**150**	**3764**
15.	irrigation	1993	394	17771
16.	flood control	200	207	1863
17.	power	7525	1084	37583
18.	III. *irrigation and power*	**9718**	**1685**	**57217**
19.	large and medium industries	450	135	3022
20.	mineral development	15	2	468
21.	village and small industries	257	122	1787
22.	IV. *industry and mining*	**722**	**259**	**5277**
23.	roads	700	220	6495
24.	road transport	100	10	1316
25.	ports and harbours	..	..	193
26.	inland water transport	..	2	26
27.	civil aviation	..	..	13
28.	tourism	16	11	199
29.	V. *transport and communications*	**816**	**243**	**8242**
30.	general education	617	448	5627
31	technical education	170	60	811
32.	cultural programmes	..	8	37
33	health	410	212	2719

(Rs. lakhs)

(0)	(1)	(17)	(18)	(19)
34.	water supply	406	139	5598
35.	housing	210	103	1901
36.	urban development		679[1]	1002
37.	welfare of backward classes	72	57	1087
38.	social welfare	12	21	136
39.	labour and labour welfare	114	41	471
40.	public cooperation	..	..	2
41.	VI. *social services*	**2011**	**1768**	**19391**
42.	statistics	3	3	53
43.	information and publicity	4	4	83
44.	state capital projects	..	..	661
45.	special and backward areas	537	..	965
46.	evaluation machinery	1	4	16
47.	others	88	1	568
48.	VII. *miscellaneous*	**633**	**12**	**2346**
49.	**grand total**	**17919**	**5267**	**116859**

[1]includes Rs. 677 lakhs for Calcutta Metropolitan Planning Orgn.

ANNEXURE 2.3

Plan Outlays for 1970-71—*Union Territories*

(Rs. lakhs)

sl. no.	head of development	Andaman & Nicobar Islands	Chandigarh	Dadra & Nagar Haveli
(0)	(1)	(2)	(3)	(4)
1.	agricultural production	5.60	0.25	5.64
2.	minor irrigation	..	0.50	1.84
3.	soil conservation	1.20	..	2.81
4.	animal husbandry	2.70	8.30	0.68
5.	dairying and milk supply	0.77	..	1.09
6.	forests	14.50	0.44	0.94
7.	fisheries	1.07	0.11	..
8.	warehousing and marketing	..	..	..
9.	I. *agricultural programmes*	25.84[1]	9.60[1]	13.00[1]
10.	cooperation	2.18[1]	..	1.00[1]
11.	community development	4.00	0.17	2.00
12.	panchayats	0.40	..	..
13.	II. *cooperation and community development*	6.58	0.17	3.00
14.	irrigation	..	..	..
15.	flood control	..	..	1.00
16.	power	12.00	40.00	6.00
17.	III. *irrigation and power*	12.00	40.00	7.00
18.	large and medium industries	..	..	..
19.	mineral development	..	..	..
20.	village and small industries	0.59	8.00	1.50
21.	IV. *industry and mining*	0.59	8.00	1.50
22.	roads	82.00	2.00	10.00
23.	road transport	8.75	..	..
24.	ports and harbours	36.50	..	..
25.	shipping	17.00	..	..
26.	inland water transport	..	..	..
27.	civil aviation	..	..	..
28.	tourism	1.40	0.80	..
29.	V. *transport and communications*	145.65	2.80	10.00
30.	general education	20.00	11.00	5.40
31.	technical education	..	6.53	..
32.	cultural programmes	..	..	..

(Rs. lakhs)

(0)	(1)	(2)	(3)	(4)
33.	health	7.00	8.80	1.50
34.	water supply	82.00	2.10	2.00
35.	housing	2.50	5.50	2.00
36.	urban development	1.34	..	..
37.	welfare of backward classes	..	..	0.10
38.	social welfare	0.40	3.35	..
39.	labour and labour welfare	..	..	..
40.	public cooperation	**113.24**	**37.28**	**11.00**
41.	VI. *social services*	0.07	..	0.23
42.	statistics	1.64	0.12	0.07
43.	information and publicity	..	77.03	..
44.	state capital projects	..	..	..
45.	special and backward areas	..	..	..
46.	evaluation machinery	3.76	..	..
47.	others	**5.47**	**77.15**	**0.30**
48.	VII. *miscellaneous*	**309.37**	**175.00**	**45.80**
49.	**grand total**			

[1]indicates earmarked outlay for the head of development.

ANNEXURE 2.3—Contd.

(Rs. lakhs)

sl. no.	head of development	Delhi	Goa, Daman & Diu	Himachal Pradesh
(0)	(1)	(5)	(6)	(7)
1.	agricultural production	20.09	74.08	158.00
2.	minor irrigation	24.66	15.50	47.50
3.	soil conservation	2.08	9.59	47.50
4.	animal husbandry	8.00	21.18	28.00
5.	dairying and milk supply	..	14.06	22.00
6.	forests	..	14.36	110.00
7.	fisheries	4.00	25.95	8.00
8.	warehousing and marketing	1.75	3.25	5.00
9.	I. *agricultural programmes*	**60.58**[1]	**177.97**[1]	**426.00**[1]
10.	cooperation	24.00[1]	3.61[1]	25.00[1]
11.	community development	..	14.40	45.00
12.	panchayats	1.00	3.77	6.00
13.	II. *cooperation and community development*	**25.00**	**21.78**	**76.00**
14.	irrigation	..	6.50	..
15.	flood control	135.00	..	3.00
16.	power	765.00	95.98	370.00
17.	III. *irrigation and power*	**900.00**	**102.48**	**373.00**
18.	large and medium industries	..	5.30	40.00
19.	mineral development	..	0.40	5.00
20.	village and small industries	75.00	11.83	35.00
21.	IV. *industry and mining*	**75.00**	**17.73**	**80.00**
22.	roads	246.23	90.00	477.00
23.	road transport	190.00	..	35.00
24.	ports and harbours	..	7.65	..
25.	shipping	..	..	..
26.	inland water transport	..	30.00	..
27.	civil aviation	..	..	..
28.	tourism	..	3.70	14.00
29.	V. *transport and communications*	**436.23**	**131.35**	**526.00**
30.	general education	390.27	65.00	65.00
31.	technical education	30.87	20.26	12.00
32.	cultural programmes	..	2.00	..

(Rs. lakhs)

(0)	(1)	(5)	(6)	(7)
33.	health	140.42	61.36	48.00
34.	water supply	415.00	105.00	50.00
35.	housing	140.09	12.26	10.00
36.	urban development	181.00	3.44	10.00
37.	welfare of backward classes	25.00	3.05	8.00
38.	social welfare	14.95	1.55	2.00
39.	labour and labour welfare	25.05	4.00	8.00
40.	public cooperation	0.35	..	..
41.	VI. *social services*	**1363.00**	**277.92**	**213.00**
42.	statistics	1.60	1.72	1.00
43.	information and publicity	4.90	3.00	5.00
44.	state capital projects	..	..	..
45.	special and backward areas	..	..	..
46.	evaluation machinery	0.54	0.47	0.60
47.	others	..	8.00	4.40
48.	VII. *miscellaneous*	**7.04**	**13.19**	**11.00**
49.	**grand total**	**2866.85**	**742.42**	**1705.00**

[1]indicates earmaked outlay for the head of development.

ANNEXURE 2.3—Contd.

(*Rs. lakhs*)

sl. no.	head of development	Laccadive & Minicoy Islands	Manipur	NEFA
(0)	(1)	(8)	(9)	(10)
1.	agricultural production	2.99	25.32	13.35
2.	minor irrigation	..	6.00	3.94
3.	soil conservation	..	3.35	5.65
4.	animal husbandry	0.96	6.67	7.79
5.	dairying and milk supply	..	2.04	..
6.	forests	..	6.50	30.00
7.	fisheries	16.07	7.98	2.32
8.	warehousing and marketing	..	..	..
9.	I. *agricultural programmes*	**20.02**[1]	**57.86**[1]	**63.05**[1]
10.	cooperation	4.28[1]	9.64[1]	8.54[1]
11.	community development	1.00	7.80	20.00
12.	panchayats	..	1.81	..
13.	II. *cooperation and community development*	**5.28**	**19.25**	**28.54**
14.	irrigation	..	..	..
15.	flood control	..	13.00	..
16.	power	5.86	80.53	29.50
17.	III. *irrigation and power*	**5.86**	**93.53**	**29.50**
18.	large and medium industries	..	19.00	1.30
19.	mineral development	..	..	..
20.	village and small industries	1.21	17.87	9.02
21.	IV. *industry and mining*	**1.21**	**36.87**	**10.32**
22.	roads		170.00	137.50
23.	road transport		12.00	..
24.	ports and harbours		..	..
25.	shipping	3.67	..	..
26.	inland water transport		..	..
27.	civil aviation		..	9.00
28.	tourism	..	1.03	..
29.	V. *transport and communications*	**3.67**	**183.03**	**146.50**
30.	general education	6.67	49.63	34.61
31.	technical education	..	2.02	..
32.	cultural programmes	..	0.27	..
33.	health	1.86	36.72	16.76

(Rs. lakhs)

(0)	(1)	(8)	(9)	(10)
34.	water supply	..	11.00	6.00
35.	housing	..	3.50	..
36.	urban development	0.05	2.30	..
37.	welfare of backward classes	0.25	8.70	..
38.	social welfare	..	1.00	..
39.	labour and labour welfare	..	0.50	2.50
40.	public cooperation	..	..	..
41.	VI. *social services*	**8.83**	**115.64**	**59.87**
42.	statistics	..	1.60	1.97
43.	information and publicity	..	3.50	4.50
44.	state capital projects	..	..	..
45.	special and backward areas	..	..	..
46.	evaluation machinery	..	..	..
47.	others	0.15	7.70	40.75[1]
48.	VII. *miscellaneous*	**0.15**	**12.80**	**47.22**
49.	**grand total**	**45.02**	**518.98**	**385.00**

[1]indicates earmarked outlay for the head of development.

[2]includes Rs. 40 lakhs for settlement of ex-servicemen.

ANNEXURE 2.3—*Concld.*

(Rs. lakhs)

sl. no.	head of development	Pondicherry	Tripura	Total
(0)	(1)	(11)	(12)	(13)
1.	agricultural production	20.59	51.11	377.02
2.	minor irrigation	12.47	12.00	124.41
3.	soil conservation	4.67	7.40	84.25
4.	animal husbandry	6.95	8.70	99.93
5.	dairying and milk supply	8.29	5.64	53.80
6.	forests	..	17.40	194.14
7.	fisheries	17.19	6.15	88.84
8.	warehousing and marketing	..	2.00	12.00
9.	I. *agricultural programmes*	**70.16**[1]	**110.40**[1]	**1034.48**
10.	cooperation	4.84[1]	7.92[1]	91.01
11.	community development	5.60	8.00	107.97
12.	panchayats	..	5.22	18.20
13.	II. *cooperation and community development*	**10.44**	**21.14**	**217.18**
14.	irrigation	6.45	..	12.95
15.	flood control	7.25	21.83	181.08
16.	power	17.60	372.13	1794.70
17.	III. *irrigation and power*	**31.30**	**393.96**	**1988.63**
18.	large and medium industries	3.08	1.00	69.88
19.	mineral development	..	..	5.40
20.	village and small industries	7.42	14.71	182.15
21.	IV. *industry and mining*	**10.50**	**15.71**	**257.43**
22.	roads	16.29	110.00	1341.02
23.	road transport	..	10.00	255.75
24.	ports and harbours	10.14	..	57.96
25.	shipping	..	..	17.00
26.	inland water transport	..	..	30.00
27.	civil aviation	..	..	9.00
28.	tourism	1.58	0.70	23.21
29.	V. *transport and communications*	**28.01**	**120.70**	**1733.94**
30.	general education	39.77	64.18	751.53
31.	technical education	3.76	14.68	90.12
32.	cultural programmes	0.10	..	2.37
33.	health	12.90	12.79	348.11

(Rs. lakhs)

(0)	(1)	(11)	(12)	(13)
34.	water supply	29.90	6.00	709.00
35.	housing	16.85	3.25	196.00
36.	urban development		3.25	199.99
37.	welfare of backward classes	5.35	34.35	86.04
38.	social welfare	1.17	1.40	22.17
39.	labour and labour welfare	1.60	0.66	46.06
40.	public cooperation	..	..	0.35
41.	VI. *social services*	111.40	140.56	2451.74
42.	statistics	0.29	1.45	9.93
43.	information and publicity	1.90	8.45	33.08
44.	state capital projects	..	..	77.03
45.	special and backward areas	..	..	..
46.	evaluation machinery	..	..	1.61
47.	others	..	4.44	69.20
48.	VII. *miscellaneous*	2.19	14.34	190.85
49.	**gradd total**	264.00	816.81	7874.25

[1]indicates earmarked outlay for the head of development.

CHAPTER 3

FINANCING THE PLAN

THE scheme of financing the Annual Plan for 1970-71 shows significant changes as compared to that for the Annual Plan for 1960-70. As mentioned in the Fourth Plan document, the development outlays which are being financed by certain financial institutions through borrowings from commercial banks and the market have now been included in the Plan. Consequently, resources corresponding to these outlays have been taken into account in the scheme of financing the Annual Plan for 1970-71. These include resources to be raised by the Food Corporation of India for building up buffer-stocks of foodgrains and by term-lending institutions like the Industrial Development Bank, the Industrial Finance Corporation, the Industrial Credit and Investment Corporation and the Agricultural Refinance Corporation. Besides, credit has now been taken for resources to be raised by Indian Dairy Corporation, Damodar Valley Corporation, Agricultural Refinance Corporation Rural Electrification Corporation and Central Power Generation undertakings.

3.2. The estimates for 1970-71 take into account the effect on the resources position of the Central and State Governments of the nationalisation of 14 Major commercial banks and re-orientation of the investment policies of Life Insurance Corporation and Provident Funds. Account has also been taken of two important decisions which were taken during 1969-70. The Central Government's decision on the recommendations of the Fifth Finance Commission was announced in August 1969. Secondly it was decided to give special accommodation to States having overall non-Plan deficits so as to enable them to use the entire proceeds of their additional resource mobilisation for augmenting the size of their Plans.

3.3. The following Table shows the scheme of financing the Annual Plan for 1970-71, together with the corresponding estimates for 1969-70.

TABLE 3.1: *Estimates of Resources for the Plan*

(Rs. crores)

Sl No.		Annual Plan 1969-70[1]			Annual Plan 1970-71[1]		
		Centre	States	Total	Centre	States	Total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	balance from current revenues at 1968-69 rates of taxation	190	—51	139	185	—11	174
2.	contribution of public enterprises at 1968-69 fares, freights and tariffs	184	88	272	201	89	290
3.	railways	22	..	22	9	..	9
4.	posts & telegraphs	35	..	35	34	..	34
5.	IDC, ARC, REC, DVC and central power generation units	[2]	..	[2]	34	..	34
6.	Others	127	88	215	124	89	213
7.	retained profits of Reserve Bank	10	6[4]	16	40	7[4]	47
8.	market borrowings of central & state governments (net)	103	51	154	162	102	264
9.	borrowings by financial institutions, including FCI :	[2]	..	[2]	110	..	110
10.	food corporation of India	[2]	..	[2]	65	..	65
11.	others	[2]	..	[2]	45	..	45
12.	small savings	48	87	135	53	87	140
13.	annuity deposits, compulsory deposits, prize bonds and gold bonds	—38	..	—38	—18	..	—18
14.	state provident funds	68	53	121	80	54	134
15.	miscellaneous capital receipts (net)	296	—104	192	385	—72	313
16.	additional resource mobilisation	126	122	248	302	166	468
17.	by centre	126	..	126	302	..	302
18.	1969-70 measures[3]	126	..	126	135	..	135
19.	1970-71 measures[3]	..	..	..	167	..	167
20.	by states	..	122	122	..	166	166
21.	1969-70 measures	..	122	122	..	84	84
22.	1970-71 measures	..	..	..	..	82	82
23.	loans from LIC and state enterprises' market borrowings (gross)	..	65	65	..	112	112
24.	LIC loans to state governments for housing and water supply	..	18	18	..	19	19
25.	market borrowings of state enterprises	..	20	20	..	64	64

(Rs. crores)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
26.	LIC loans to state enterprises	..	27	27	..	29	29
27.	total domestic budgetary resources	987	317	1304	1500	534	2034
28.	budgetary receipts corresponding to external assistance (net) [6]	713	..	713	563	..	563
29.	other than PL 480	481	..	481	426	..	426
30.	PL 480 assistance	232	..	232	137	..	137
31.	deficit financing	254	..	254	225	..	225
32.	*aggregate resources (27+28+31)*	**1954**	**317**	**2271**	**2288**	**534**	**2822**
33.	assistance for state plans	—615	615	..	—635	635	..
34.	resources for the plan (32+33)	1339	932	2271	1653	1169	2822

FOOTNOTES: [1] As published in the Planning Commission document "Annual Plan 1969-70".

[2] The estimates for the Centre represent Budget Estimates while those for the States are based on the discussions held with them during September 1969—January 1970.

[3] No estimates in respect of these items were prepared at the time of the formulation of the Annual Plan for 1969-70, since the decision to include in the Plan the outlays financed from the resources under these items was taken subsequently.

[4] Reserve Bank loan to State Governments for participation in share capital of cooperatives.

[5] Net of States' share.

[6] Net of loan repayments only. Interest payments have been allowed for in calculating the balance from current revenues.

The Annual Plan for 1970-71 places greater reliance on domestic budgetary resources as compared to the Annual Plan for 1969-70. To finance the aggregate outlay of Rs. 2822 crores in 1970-71, domestic budgetary resources are expected to contribute Rs. 2034 crores. This works out to 72 per cent of the total Plan outlay for 1970-71 as against 57.4 per cent estimated for the Annual Plan for 1969-70. Utilisation of budgetary receipts corresponding to external assistance, viz., Rs. 563 crores, on the other hand, works out to 20 per cent of the total Plan outlay for 1970-71 as against 31.4 per cent for 1969-70. Deficit financing for 1970-71 has been taken at Rs. 225 crores. This forms 8 per cent of total Plan outlay as compared to 11.2 per cent in the Annual Plan for 1969-70.

3.4. Brief comments on individual items of Plan financing are given below.

Balance from current revenues

3.5. The Centre's contribution for the Plan in 1970-71 from current revenues at 1968-69 rates of taxation is estimated at about Rs. 185 crores, which is slightly lower than that envisaged for the Plan in 1969-70. Revenue receipts at the Centre in 1970-71 at 1968-69 rates of taxation are expected to show a substantial increase over the preceding year's level. This is, however, expected to be more than counter-balanced by the increase in devolution of funds from the Centre to the States as a result of the Fifth Finance Commission's recommendations and the normal growth of the Centre's non-Plan expenditure.

3.6. As regards States, the balance from current revenues at 1968-69 rates of State taxes, but inclusive of the share in additional taxation by the Centre in 1969-70, works out to Rs. (—) 11 crores for 1970-71. This takes into account the larger devolution from the Centre in pursuance of the Fifth Finance Commission's recommendations as also the anticipated trend increases in State revenues. On the expenditure side, appropriations for reduction or avoidance of debt have been allowed on the basis of the existing practices of the States. Full provision has been made for the cost of the increases in dearness allowance and pay scales of Government employees sanctioned up to the time of Plan discussions with the States.

Contribution by Railways

3.7. Freight traffic in 1970-71 is expected to be higher than in 1969-70 by 8.3 million tonnes. Passenger traffic is expected to increase by about 3 per cent. Based on these traffic projections, the railways' contribution at 1968-69 fares and freights, is estimated at Rs. 9 crores in 1970-71. This takes into account the increase in costs on account of the enhancement of steel prices in January, 1970.

Contribution by Posts & Telegraphs

3.8. In 1970-71, the Posts & Telegraphs are expected to contribute from their own sources, at 1968-69 rates of postal charges, about Rs. 34 crores, which is nearly the same as that envisaged for the Annual Plan for 1969-70.

Contribution by public enterprises

3.9. The Indian Dairy Corporation is expected to provide in 1970-71 about Rs. 8 crores from its internal resources for financing the Plan programmes. ARC, DVC and the Central Power generation units are expected to provide another Rs. 12 crores. Besides, Rs. 14 crores are expected to become available to the Rural Electrification Corporation.

3.10. The contribution in 1970-71 by Central enterprises other than those mentioned above is estimated at about Rs. 124 crores. The State Governments' undertakings, mainly State Electricity Boards and Road Transport Corporations, are expected to contribute another Rs. 89 crores towards the financing of their development programmes.

Retained Profits of RBI

3.11. The Programmes of agricultural and industrial development financed by the Reserve Bank out of its Long-Term Operations Funds are likely to aggregate to about Rs. 47 crores in 1970-71. This is inclusive of loans to States of Rs. 7 crores for participation in the share capital of the cooperatives.

Market borrowings by the Central and State Governments

3.12. Market borrowings by the Central and State Governments are expected to aggregate Rs. 264 crores in 1970-71. Such a large order of borrowings has become possible on account of the nationalisation of the major commercial banks.

Borrowings by Financial institutions

3.13. The financial institutions like IDBI, IFC, ICICI and ARC are expected to borrow Rs. 45 crores in 1970-71 for financing their Plan schemes. In addition, the borrowing programme of the Food Corporation of India for addition to buffer stocks has been taken at Rs. 65 crores for 1970-71.

Small Savings

3.14. In the light of the trend in small savings collections in recent years, the target for 1970-71 has been placed at Rs. 140 crores. The States' share of these receipts has been taken at Rs. 87 crores, while the balance of Rs. 53 crores would accrue to the Centre.

Annuity deposits, compulsory deposits, prize bonds and gold bonds

3.15. The net outgo under these items is estimated at Rs. 18 crores for 1970-71.

State Provident funds

3.16. The State provident funds are expected to provide about Rs. 134 crores for financing the Plan in 1970-71. This shows an increase of Rs. 13 crores over the corresponding estimate for the Annual Plan for 1969-70.

Miscellaneous capital receipts

3.17. The miscellaneous capital receipts in 1970-71 are estimated at Rs. 313 crores—Rs. 385 crores for the Centre and Rs. (—) 72 crores for the States. The large inflow at the Centre is on account of loan repayments by the States. The estimate of Rs. (—) 72 crores for the States has been worked out after taking into account special accommodation from the Centre of the order of Rs. 175 crores in 1970-71.

Additional resource mobilisation

3.18. The additional resource mobilisation undertaken by the Central Government in 1969-70 is expected to yield Rs. 135 crores, net of States' share, in 1970-71. Besides, the Central Government, Railways, and Posts and Telegraphs have announced further measures which are expected to yield, net of States' share, about Rs 167 crores in 1970-71 as shown below:

(Rs. crores)

A. *central government*	
1. union excise duties	133.3
2. import duties	29.8
3. income tax	15.0
Total A	178.1
B. posts & telegraphs	8.2
C. railways	26.0
Total (A + B + C)	212.3
less state's share	45.0
D. additional mobilisation (net)	167.3

3.19. As regards States, the measures adopted by them in 1969-70 are expected to yield about Rs. 84 crores in 1970-71. Besides, the State Governments have indicated their intention to raise another Rs. 82 crores in 1970-71. The measures announced by them in their budgets for 1970-71 are, however, expected to yield in this year about Rs. 24 crores only as shown below:

TABLE 3.2: *Additional Resource Mobilisation by States for* 1970-71.

(Rs. crores)

sl. no.		Estimated yield in 1970-71
(0)	(1)	(2)
1.	agricultural income tax	0.40
2.	state excise	1.55
3.	registration and court fees	0.10
4.	tax on motor vehicles	1.65
5.	tax on passengers and goods	0.56
6.	sales tax	7.88
7.	electricity duty	1.51
8.	entertainment tax	0.50
9.	tax on immovable property	3.17
10.	forest	1.40
11.	irrigation rates	0.25
12.	contribution to GPF	0.70
13.	other items	0.45
14.	amounts for which details are not available	3.70
	Total	23.82

Information about additional resource mobilisation undertaken by State Electricity Boards and Road Transport Corporations in the current year is not available. Besides, the State Governments might introduce some additional measures during the remaining part of the current year.

Loans from LIC and State enterprises' market borrowings

3.20. Gross loans from LIC to State Governments for housing and water supply schemes are estimated at Rs. 19 crores for 1970-71. In addition, LIC is expected to provide Rs. 29 crores to State enterprises for financing their Plan schemes. Besides, the State enterprises are expected to borrow from the market Rs. 64 crores in 70-71.

Budgetary receipts corresponding to external assistance

3.21. With the increase in internal food production, reliance on PL-480 assistance is proposed to be reduced substantially in 1970-71. Such assistance is estimated at Rs. 137 crores for 1970-71 as against the estimate of Rs. 232 crores in the Annual Plan for 1969-1970. Assistance, other than PL-480, is estimated for 1970-71 at Rs. 426 crores.

Deficit financing

3.22. Deficit financing for 1970-71 has been placed at Rs. 225 crores as against Rs. 254 crores in the Annual Plan for 1969-70.

Central assistance for State Plans

3.23. Central assistance for State Plans in 1970-71 has been fixed at Rs. 635 crores as against Rs. 615 crores in 1969-70.

CHAPTER 4

AGRICULTURE

Outlays

An outlay of Rs. 470.89 crores has been provided for programmes of agriculture and allied sectors in 1970-71 as against the Plan outlay of Rs. 332.16 crores in 1969-70. The break-up of Plan outlay between the Centre, States and Union Territories is as under :

TABLE 4.1 : *Outlay for* 1970-71 *and* 1969-70

(Rs. crores)

sl. no.		1969-70 plan outlay	1970-71 plan outlay
(0)	(1)	(2)	(3)
1.	centre	96.73	195.61
2.	centrally sponsored	14.17	18.91
3.	states	209.68	243.86
4.	union territories	11.58	12.51
	total	332.16	470.89

4.2. The detailed break-up of Plan outlay for 1970-71 by main heads of development is :

TABLE 4.2 : *Outlays of Agriculture and Allied Programmes by Main Heads of Development*—1970-71

(Rs. crores)

sl. no.	head of development	centre	centrally sponsored	states	union territories	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)
1.	agricultural production	4.81	5.91	50.75[1]	3.77[1]	65.24
2.	development of small farmers and agricultural labour	4.50	..	[2]	[2]	4.50
3.	research & education	10.50	..	[2]	[2]	10.50
4.	minor irrigation	2.42	..	88.43	1.24	92.09
5.	soil conservation	0.02	3.38	23.35	0.84	27.59
6.	area development	1.80	..	3.92	..	5.72

(Rs. crores)

(0)	(1)	(2)	(3)	(4)	(5)	(6)
7.	animal husbandry	0.90	0.33	11.02	1.00	13.25
8.	dairying and milk supply	8.56[3]	..	7.09	0.54	16.19[1]
9.	fisheries	3.82	1.50	7.73	0.89	13.94
10.	forests	0.58	0.20	13.03	1.94	15.75
11.	warehousing, marketing and storage	15.34	0.40	0.90	0.12	16.76
12.	food processing and subsidiary foods	2.11	0.14	..	..	2.25
13.	buffer stocks of agri. commodities	65.00	..	..	..	65.00
14.	central support to financial institutions	55.95	..	..	..	55.95
15.	cooperation	18.58	5.01	17.41	0.91	41.91
16.	community development	0.72	2.04	19.27	1.08	23.11
17.	panchayats	[4]	..	0.96	0.18	1.14
18.	*total*	**195.61**	**18.91**	**243.86**	**12.51**	**470.89**

[1]Includes outlays on Development of Small Farmers etc. Research & Education.

[2]Provision shown under 'Agricultural Production'.

[3]Includes an outlay of Rs. 7.81 crores for Indian Dairy Corporation.

[4]Included under Community Development.

4.3. The above outlay under agriculture does not take into account the substantial investment to be financed from resources other than the Plan outlays. The total investment to be financed through financial institutions (whether from Plan funds or otherwise) is shown below:

TABLE 4.3: *Investment from Financial Institutions*

(Rs. crores)

		1970-71		
Sl. No.	Institution	total investment loans to be financed	plan outlay	other resources to be raised
(0)	(1)	(2)	(3)	(4)
1.	agricultural refinance corporation	35	35	..
2.	agro-industries corporations	14	7	7
3.	land development banks	140	34	106
4.	central cooperative banks	30	..	30
5.	commercial banks	60	..	60
	total	**279**	**76**	**203**

Targets

4.4. The targets of production of foodgrains and major commercial crops for 1970-71 along with the estimated achievements in 1969-70 are given below:

TABLE 4.4: *Targets of Production*

(Rs. crores)

sl. no.	item	unit	1969-70 target	1969-70 estimated achievement	1970-71 target
(0)	(1)	(2)	(3)	(4)	(5)
1.	foodgrains	million tonnes	101.00	99.50	106.00
2.	oilseeds	,,	8.50	7.61	9.00
3.	sugarcane (gur)	,,	12.50	13.44	13.20
4.	cotton	million bales	6.00	5.23	6.50
5.	jute	,,	6.40	5.61	6.70

4.5. The targets of important development programmes envisaged for 1970-71 together with the estimated achievement for 1969-70 are given below:

TABLE 4.5: *Targets of Selected Development Programmes*

(Rs. crores)

sl. no.	programme	unit	1969-70 target	1969-70 estimated achievement	1970-71 target
(0)	(1)	(2)	(3)	(4)	(5)
1.	high yielding varieties programme	million hectares	10.92	11.07	15.05
	rice	,,	3.24	4.13	5.66
	wheat	,,	4.05	4.78	5.88
	maize	,,	0.81	0.45	0.56
	Jowar	,,	1.61	0.52	1.18
	bajra	,,	1.21	1.19	1.77
2.	multiple cropping (additional)	,,	7.87	NA	2.24
3.	minor irrigation (additional)	,,	1.40	1.49	1.76
4.	soil conservation on agricultural lands (additional)	,,	0.87	0.92	1.20

(Rs. crores)

0	1	2	3	4	5
	consumption of chemical fertilizers.	million tonnes			
5.	nitrogenous (in terms of N)	,,	1.70	1.42	1.73
	phosphatic (in terms of P_2O_5)	,,	0.60	0.43	0.56
	potassic (in terms of K_2O)	,,	0.30	0.17	0.25
6.	urban compost	,,	4.44	4.20	4.75
7.	green manuring	million hectares	9.56	7.65	8.65
8.	plant protection	,,	76.00	33.88	42.32

State-wise break-up of the targets for important programmes is shown in Annexures 4.1 to 4.6.

I. Agriculture

4.6. The All India Coordinated Projects on wheat, rice, barley, maize, millets and pulses taken up for implementation during 1969-70 will continue to operate during 1970-71. Two high yielding long duration varieties of rice, Pankaj and Jagannath (both of 150 days duration), which were released during 1969-70, are expected to receive wider acceptance than the earlier varieties. The grain type and quality of Jagannath is exceptionally good. These varieties are likely to be effective in increasing rice productivity in the heavy rainfall areas of West Bengal, Assam, Orissa and Andhra Pradesh which are frequently subjected to water logging. High yielding dwarf basmati rice varieties developed at the Indian Agricultural Research Institute are being multiplied before release. During 1970-71, it is porposed to conduct further research on the rice varieties collected in the Assam hills which revealed quick cooking quality, high protein content and better protein distribution in the grain.

4.7. The field tests on promising strains of wheat with three genes for dwarfing and capability for high yields will be continued during 1970-71. One such variety, Lal Bahadur, was released by the Rajasthan State Variety Release Committee in 1969. As this variety is susceptible to rusts, its suitability for cultivation in other areas is currently being investigated. The area under wheat is likely to increase during the year as experience has shown that dwarf and photo-insensitive wheat varieties which have accounted for large increase in production can also be grown successfully in Tamil Nadu, Mysore and Andhra Pradesh. A

rust-resistant wheat variety Kiran, developed at the Indian Agricultural Research Institute, is proposed to be released during the year. Trials on high yielding and fertiliser responsive varieties of durum wheat (Ma-caroni) will be continued.

4.8. New varieties of seeds of millets, sorghum and maize will be put to further tests. Some of them are under pre-release multiplication. An early maturing (120-130 days), variety of arhar-Type-21, evolved in Uttar Pradesh, has given large yields even under rainfed conditions when properly fertilised. Several short duration and high yielding varieties of arhar, moong, urad and cowpea are under pre-release multiplication.

4.9. The All India Coordinated Research Projects on cotton, oil-seeds, jute and soyabean will be continued during 1970-71. New varieties or hybrids of cotton (MCU-5), Sujata (Hybrid 4) have been released and further research will be organised. Two new varieties of jute released during 1969-70 have shown great possibilities of quality improvement. Multi locational testing of high yielding oil-seeds would continue under the All India Oilseeds project. The project on soyabeans will be organised on an all-India basis.

4.10. A number of research projects on soils, agronomy, water management and engineering formulated in the previous year will be taken up for implementation during 1970-71 on a more effective basis. The agronomic experiments and national demonstrations would be extended to more centres during 1970-71.

4.11. The Indian Veterinary Research Institute, National Dairy Research Institute and Central Sheep and Wool Research Institute will continue to conduct research on problems concerned with animal production. Investigations at the Central Inland Fisheries Research Institute have pointed to possibilities of commercialisation of induced production of fish. These possibilities will be exploited in 1970-71. Efforts will be made to experiment on artificial propagation of *hilsa itisha* under controlled conditions.

4.12. New agricultural universities were set up at Jorhat (Assam), Akola (Maharashtra), Patna (Bihar) and Hissar (Haryana) in 1969-70, bringing their number to thirteen. During 1970-71 agricultural universities are likely to be set up in Kerala and Tamil Nadu. A project for strengthening the post-graduate departments of education and research in various disciplines connected with agricultural production will be implemented with U.N.D.P. assistance. Five centres of advanced studies are likely to start functioning under this project during 1970-71.

Farmers' Education

4.13. The scheme of Farmers' Training and Education designed to provide essential support to agricultural production in the high yielding varieties programmes had been introduced in 60 districts by the end of 1969-70. The scheme provides short institutional training courses to the farmers and have production-*cum*-demonstration camps and group discussions. In the light of experience, the scheme has undergone considerable changes in content and methodology with added emphasis on non-institutional training in which national and other demonstrations on farmers' fields will become the principal tool of farmers' education, supported by audio-visual aids and radio broadcasts. Radio will be used as a major support medium for the training activities and will be linked with 300 farmers' discussion groups in each district. During 1970-71, the programme would be extended to 20 additional districts.

Improved Seeds

4.14. During 1970-71, the area under high yielding varieties would be increased to 15.05 million hectares. The foundation seeds of varieties of all-India importance and the hybrids would continue to be supplied through the National Seeds Corporation. In addition, multiplication of seeds of wheat, potato, cotton, vegetables, groundnut, soyabean and fodder crops would continue to be taken up by the Corporation. Consequent to the enforcement of the Seeds Act 1966, the seed certification work in the States would be intensified. The certification of seed in Gujarat, Andhra Pradesh, Kerala and Tamil Nadu would be done through a State Certification Agency while the certification work in Assam, Bihar, Madhya Pradesh, Punjab, Haryana, Uttar Pradesh and West Bengal would continue to be done by the National Seeds Corporation. The State Plans provide for the strengthening of seed multiplication farms in regard to irrigation facilities, storage arrangements farm management and supply of pure nucleus or breeder seeds. The Plans also provide for the strengthening of seed testing laboratories and for administrative machinery to enforce seed law and certification with a view to introducing quality control in seed trade. The production and marketing of high quality seeds by seed companies, seed cooperatives and panchayats would be encouraged. The Tarai Development Project would cover under seed production an area of 10,800 hectares, which includes 2,000 hectares under soyabean during the year 1970-71. Five large scale Central State Farms had been set up by 1969-70 and the State Farms Corporation was set up in May 1969 for their administration

During 1970-71, a farm is proposed to be set up in Mizo Hills. It will be a mixed farm where piggery and poultry development will also be taken up. Two more farms are proposed to be set up during the year, one in the Sutlej belt area of Punjab and the other in Cannanore district of Kerala.

Fertilizers and Manures

4.15. The supply of chemical fertilisers was adequate during 1969-70 and is likely to remain so. The Fertiliser Control Order was recently amended with a view to providing compulsory stocking of phosphatic and potassic fertilisers to the extent of a minimum of 20 per cent of the nitrogenous fertiliser at any time by retailers. This is expected to induce retailers to sell phosphatic and potassic fertilisers along with nitrogenous fertiliser so as to encourage a balanced use of the three nutrients. The programme for the promotion of the use of potash is proposed to be strengthened. The system of licensing dealers has been replaced by a liberal system of registration of dealers. This is expected to help to broad-base the distribution system and increase the number of sale points. The State Plans provide for the strengthening of soil testing facilities, demonstration of balanced fertiliser use on cultivators' fields, construction of adequate storage capacity at various levels and application of soil conditioners. The Central Plan provides for some strategic storage at major centres of consumption. A scheme for establishment of soil testing laboratories by cooperatives has been formulated by the National Cooperative Development Corporation. Ten such laboratories are proposed to be established during 1970-71 as an initial step. The scheme envisages that the Corporation will provide long term loans to the State Governments to meet the capital cost. The recurring expenditure will be met by the cooperatives. It is also proposed to set up a Fertiliser Promotion Council, as a joint venture of Government and industry to undertake massive promotional programme. The commercial banking system will provide larger amount of credit for fertiliser stocking and use on more liberal terms. The Agricultural Finance Corporation has drawn up schemes for financial support both to the dealers of fertilisers and farmers, and for the construction of fertiliser storage godowns. Government is considering a scheme for guaranteeing extension of credit to fertiliser retailers.

4.16. The production of rural compost during 1969-70 is estimated at about 150 million tonnes. It is proposed to increase this production to about 156 million tonnes during 1970-71. The State Plans provide for the installation of cowdung gas plants for the production of rural compost. Growing of green manure

crops as catch crops would be encouraged under the multiple cropping programme. Under the urban compost, programme, a new project for setting up mechanical compost plant for the manufacture of organic manure from city wastes is expected to be initiated during 1970-71. Schemes for sewage and sullage utilisation are in progress. It is proposed to implement schemes for complete utilisation of sewage and sullage in places where it is at present partially utilised or not utilised at all.

Plant Protection

4.17. In addition to the extension of coverage of plant protection measures, a centrally sponsored scheme for carrying out aerial spraying in selected endemic areas will be taken up during 1970-71. In these areas, the epidemics occur every year because of the endemic nature of the pests or diseases. The object is to carry out aerial spraying for three to five years with a view to bringing down the incidence of pests amounting to near eradication. It is proposed to cover about 64 thousand hectares during 1970-71. In addition to the spraying in endemic areas, aerial spraying of pesticides would be extended during 1970-71 to cover about 12 lakh hectares against 4.4 lakh hectares in the preceding year.

4.18. During 1970-71 it is proposed to take up two new pilot projects: (i) evaluation and demonstration of use of herbicides in various crops and (ii) establishment of parasites and predators for the biological control of insects, pests and weeds. The aim of the former is to introduce biological control of insect pests and weeds as a supplement to chemical methods. Under the second project, the efficacy and economics of weed control using herbicides will be demonstrated to the farmers. The demonstrations will be carried out in an area of about 2,000 hectares during 1970-71 where high yielding varieties of paddy, wheat, jowar, bajra and maize are grown.

Agricultural Machinery and Implements

4.19. Agro-Industries Corporations have by now been set up in all States excepting Nagaland. All imported tractors will continue to be distributed through these Corporations, they will make arrangements for pre-sale and after-sale services and maintenance. These Corporations would also distribute power tillers, combined harvestors, discs, iron and steel and tyres and tubes. To enable the small farmers to modernise their operations, agricultural machinery hiring centres are proposed to be organised under the auspices of the Agro-Industries Corporations.

4.20. To extend tractor training facilities, a third training centre is to be set by the Central Government during 1970-71. In addition, the State training centres will provide similar facilities to farmers in the States. The Intensive Agricultural District Programme workshop wings attached to the gramsevak training centres will also be strengthened to intensify the training programme. The programme for popularisation of new equipment and improved implements will be intensified during 1970-71 by the State Governments and Agro-Industries Corporations. Farmers need assistance in selecting and meeting their requirements of different types of implements and equipments. Opening of special cells in the State Directorates of Agriculture is envisaged during 1970-71 for providing such advice to farmers.

High Yielding Varieties

4.21. The success of the high yielding varieties programme is of crucial importance. Out of an increase of 6 million of tonnes of foodgrains envisaged during 1970-71, 4 million tonnes are attributed to this programme. This is expected to be achieved largely by the extension of area coverage. The target of 10.9 million hectares for 1969-70, comprising 5.2 million hectares during kharif season and 5.7 million hectares during rabi-summer seasons, was exceeded. For 1970-71 a target of 15.05 million hectares, comprising 5.66 million hectares under paddy, 5.88 million hectares under wheat, 0.56 million hectares under hybrid maize, 1.18 million hectares under hybrid jowar and 1.4 million hectares under bajra has been proposed.

Multiple Cropping

4.22. On account of the absence of short duration varieties, it was not possible until recently to make cropping intensity a focal point of agricultural strategy. Techniques of inter-cropping and relay-cropping have, however, been successfully developed now. For 1970-71, a target of 2.24 million hectares of additional area under multiple cropping has been envisaged.

Soil Conservation

4.23. Under the soil conservation programme, integrated programmes of soil and water conservation are being taken up in different rainfall zones on agricultural as well as non-agricultural lands. During 1969-70, the programme was taken up over an area of about 0.92 million hectares. The measures included contour bunding and terracing of agricultural lands, afforestation and pasture development in denuded areas, reclamation of ravines, treatment of saline, alkaline and water-logged

areas and water management works, land grading and levelling underground pipe system and line channels in the command areas of irrigation projects. During 1970-71, conservation measures are to be extended to an additional area of 1.2 million hectares.

4.24. Soil conservation work in the catchments of 13 major river valleys projects will be intensified with the primary object of prolonging life of the reservoirs faced with the problem of siltation. During 1970-71, similar works will be initiated in 8 additional river valley projects, covering an area of 0.1 million hectares. The Central unit for soil conservation (hydrology and sedimentation) will collect and correlate hydrological and sedimentation data for the preparation of work plans in the river valley projects. Programme for the reclamation of about 8 thousand hectares of ravine lands is being taken up in Gujarat, Madhya Pradesh, Rajasthan and Uttar Pradesh. An area of 1200 hectares would be reclaimed during 1970-71.

4.25. The current programme of soil survey in the 5 innovative IADP districts will be intensified. About 800,000 hectares (400,000 hectares detailed survey and 400,000 hectares reconnaissance soil survey) would be covered under the scheme. In addition a detailed survey of an area of 275 thousand hectares would be completed during 1970-71 in the catchments. Photo-interpretation work will be initiated in the newly selected 8 river valley projects. The resource inventory centre, set up in 1967-68, will continue its programme of collection, collation and preservation of available data.

Commercial Crops

4.26. With the object of producing long staple cotton by adopting intensive cultivation measures through package schemes, 4.54 lakh hectares were covered. An additional area of 4.76 lakh hectares is to be covered during 1970-71. Under this package programme, plant protection demonstrations and varietal demonstrations, each of about 2 hectares, are to be organised. In areas of scanty rainfall, mass plant protection is proposed to be carried out to cover an area of 35,000 hectares. The extra long staple sea—island cotton, the cultivation of which is being developed in Andhra Pradesh and Mysore, will cover an area of about 6,000 hectares during 1970-71.

4.27. Among oilseeds, emphasis will continue to be given to groundnut and castor which are export-oriented. A package

scheme for maximising production of groundnut has been in operation in 13 States with a coverage of 1 million hectares. During 1970-71, the scheme will be implemented in three more States and will cover a total area of 1.8 million hectares. Composite demonstrations with the short duration high yielding varieties of castor will be taken up on a more intensive basis during 1970-71.

4.28. In areas where adequate natural retting facilities are available and the quality of jute is superior, efforts have been made by taking up package programme and by demonstrating to the farmers the relative advantage of the use of production inputs. During 1969-70, an area of 2,635 hectares was covered under this package programme. During 1970-71, an area of 6680 hectares will be covered. The cultivators will be encouraged to use improved certified seeds and community retting tanks will afford them better retting facilities. Aerial spraying of urea on jute crop is likely to cover an area of 8,000 hectares during 1970-71.

4.29. A centrally sponsored programme of intensive development of sugarcane is being pursued in Bihar, Madhya Pradesh, Maharashtra, Tamil Nadu and Uttar Pradesh in areas around the sugar factories. During 1969-70, 2.3 lakh hectares were covered. The programme will be extended over a somewhat larger area during 1970-71. Development of sugarbeet is being taken up and would cover an area of 2,000 hectares with a production target of 70,000 tonnes of beet root during 1970-71.

4.30. The development of VFC tobacco has been taken up in the new light soil areas as a kharif crop to meet the growing export demand. Incentives are being offered for the construction of barn, digging of wells, provision of seedlings and use of pesticides. An area of 9,575 hectares was covered during 1969-70 and an additional area of 4,300 hectares will be covered during 1970-71.

4.31. Development of coconut is to be continued through the production and distribution of tall and dwarf hybrid coconut seedlings, establishment of Elite Seed Farm in Mysore, and supply of coconut seedlings in Gujarat. Farmers will get 33,000 coconut seedlings at subsidised rates during 1970-71.

4.32. The development of cashewnut will continue to be implemented through the introduction of improved practices of cultivation, manuring and control on insects, pests and diseases. Production of high yielding trees through cashew air-layers,

organisation of demonstration plots for popularising package practices, conducting of marketing surveys to improve raw nuts collection and popularisation of the plant protection measures would be carried out during 1970-71, mainly in Kerala, Mysore and Goa.

4.33. One of the important programmes under horticulture development is the development for export purposes of fruits, particularly bananas. Banana cultivation will be promoted in 16,000 hectares around seven major ports on the eastern and western coasts. A Banana Development Corporation has recently been organised. Programmes will be taken up for the development of mango and pinapple for export.

Storage and Warehousing

4.34. Construction of 15.06 lakh tonnes of storage (including the spillover from 1968-69) was taken up by the Food Department and the Food Corporation of India during 1969-70. Godowns of 3.8 lakh tonnes capacity were completed by February 1970 with an estimated expenditure of about Rs. 12.24 crores. An outlay of Rs. 14.01 crores has been included for 1970-71 for constructing about 12 lakh tonnes of storage capacity.

4.35. An additional storage capacity of 1.59 lakh tonnes (inclusive of 40,000 tonnes to be transferred by the Food Department) was envisaged for 1969-70, out of which 1.07 lakh tonnes of storage capacity has been completed and the rest is in the process of completion. Construction of another 1.03 lakh tonnes of capacity will be taken up during 1970-71. For this Rs. 67.47 lakhs have been provided. State Warehousing Corporations had 2.30 lakh tonnes of the storage capacity on the eve of the Fourth Plan which rose to 2.79 lakh tonnes by December 1969. The State Warehousing Corporations have a programme of setting up of 36 additional warehouses at a cost of Rs. 1.37 crores during 1970-71.

4.36. Under the Grain Storage Institute, one main station at Hapur and two sub-stations at Ludhiana and Bapatala will be established. During 1970-71, these three stations will be in working order and a start would be made with the training of farmers, storage operators and fabricators of storage structures. Demonstration of the structures developed at various centres will be undertaken in rural areas. Under the Save Grain Campaign, training in scientific storage and pest control will continue to be given to farmers, traders and personnel of cooperatives.

Training will be arranged locally at different centres to the staff of cooperatives, extension workers, representatives of the trade and personnel of State Governments.

Marketing

4.37. Legislation for the setting up of regulated markets is in force in all the States except Assam, Jammu & Kashmit, Kerala and Nagaland. During 1970-71, efforts will be made to introduce the legislation in these States as well. Apart from covering more markets, the strengthening of market committees will also be undertaken by providing the resources and extending the scope of their functions. A beginning has already been made by some market committees which have obtained bank finance for improvement of marketing facilities.

4.38. Surveys are being made for the identification of pockets in the intensive agricultural areas and in the command areas of the newly developing irrigation projects, where marketing problem would emerge because of production surpluses. Special problems like storage difficulties, transport bottlenecks, peak seaso.. gluts are being investigated for taking remedial measures. These surveys would be pursued during 1970-71.

4.39. Grading of agricultural produce at the farmers level will be continued and more grading centres will be established during 1970-71. New commodities like hides and skins, oilcakes, deshi cotton, minor spices, curry powder, senna leaves and pods, bananas and mangoes and tamarind will be taken up for grading and quality control as part of a phased programme before these are exported.

Agricultural Statistics

4.40. An agricultural census would be conducted during 1970 to collect data on the size and structure of agricultural holdings and other related items. Preliminary work in this direction has been started by the State Governments. During 1970-71, steps will be taken to strengthen the agro-economic research centres by providing additional staff and equipment. During 1969-70, farm management studies were in progress in 11 regions. These studies would continue during 1970-71. A coordinated scheme for studying the cost of cultivation of principal crops in different States and regions will be taken up and it will provide data for policy formulation. The scheme relating to the timely reporting of estimates of area under crops and production of

principal crops which was in operation in Bihar, Maharashtra, Mysore and Uttar Pradesh during 1969-70 will be extended to two more States during 1970-71.

Agricultural Credit

4.41. The cooperative credit structure will continue to be the main institutional agency for providing agricultural credit. It is estimated that during 1969-70, primary agricultural credit societies would have advanced short and medium term loans of the order of Rs. 520 crores. For 1970-71, the target contemplated is Rs. 565 crores. As regards long-term lending by the Land Development Banks, the loaning programme for 1970-71 is envisaged at Rs. 150 crores as against an estimated Rs. 140 crores during 1969-70.

4.42. Efforts to develop and expand the activities of cooperative credit societies will be continued. Their resources will be supplemented in a larger measure by the Agricultural Refinance Corporation and the commercial banks. During 1970-71, the Agricultural Refinance Corporation is expected to provide refinance facilities to the extent of about Rs. 35 crores for integrated schemes of agricultural development in various States.

4.43. As regards public sector commercial banks, 1969-70 witnessed considerable expansion in the sphere of agriculture. It is estimated that during the year ending March 1970, the outstandings from these banks by way of direct finance were of the order of Rs. 125 crores. In addition, the banks had provided another Rs. 117 crores by way of indirect finance, largely for facilitating fertiliser distribution. In 1970-71, the public sector commercial banks would further step up their activities by way of advances for agriculture and also by opening new branches in the rural areas, particularly in the under-banked States.

Programmes for Special Classes and Areas

4.44. One of the main objectives of the Fourth Plan is to enable as large a section of the rural population as possible, including the small cultivator, the farmer in dry areas and the agricultural labourer, to participate in development and share its benefits. As regards the category of small but potentially viable farmers, action was taken during 1969-70 to formulate a programme of specific projects in selected districts where a small farmers' development agency is to be set up. The main functions of such an agency are to identify the problems of small farmers in the area, prepare appropriate programmes, help to ensure

availability of inputs, services and credit and evaluate progress from time to time. To the maximum extent possible, existing institutions—public, cooperative and private as also local authorities such as zila parishads—would be utilised for the purpose. The agency would also give assistance to small farmers in respect of other sevices, such as land levelling, renting of machinery and marketing. The agency may itself undertake certain services for the benefit of small farmers. With a view to stimulating the flow of cooperative credit to such cultivators, it will provide grants to the central cooperative bank, the agricultural credit societies and the cooperative land development bank in the area and help them build up special funds for covering the risks, if any, apprehended in such financing. In addition, it will provide a subsidy to these institution for strengthening their managerial and supervisory staff for this purpose. It will also draw up model plans for investment and production activities to be undertaken by small farmers operating under different sets of conditions.

4.45. During 1969-70, two small farmers' projects—one in Purnea (Bihar) and another in Darjeeling (West Bengal)—were started. In addition, two projects were approved. It is envisaged that in 1970-71, all the 45 pilot projects conceived under the Fourth Plan will start functioning.

4.46. As regards the non-viable small farmer and the agricultural labourer, the Fourth Plan aims at setting up 40 projects which would provide supplementary occupations and other employment opportunities within the framework of local planning. These projects will, as far as possible, be market-based (eg., centered around towns or other areas of demand) so that there is scope for development of employment oriented activities such as poultry and dairy farming. In pursuance of this programme during 1969-70, detailed guidelines in regard to the proposed pilot projects were worked out. In 1970-71, it is contemplated that all the 40 pilot projects will be approved and activities initiated.

Development of Dry Land Farming

4.47. Areas with an average annual rainfall varying between 375 mm and 1125 mm would come within the operational scope of this programme. During the Fourth Plan, under a centrally sponsored scheme, 24 pilot projects are to be taken up. During 1970-71, work will be initiated on nine projects, covering an area of 800 hectares in each project. These projects will be located at Hyderabad (Andhra Pradesh), Rajkot (Gujarat), Hissar (Haryana), Indore (Madhya Pradesh), Sholapur (Maharashtra),

Bellary (Mysore), Jodhpur (Rajasthan), Tirunelveli (Tamil Nadu), and Jhansi (Uttar Pradesh). These pilot projects will be concerned with the application of the new technology for dry farming, including soil management, harvesting of water, introduction of drought escaping crop varieties and introduction of new agronomic practices. These pilot projects will be supported by an intensive programme of research in dry farming. During 1970-71, a new all-India coordinated research project in dry farming will be taken up. Different research aspects such as breeding, drought resistant varieties, foliar application of fertiliser, soil and moisture conservation techniques will be included within the scope of this project.

Special Areas

4.48. During 1969-70, the Area Development Programme was initiated in the command areas of Kosi (Bihar), Tungabhadra (Mysore) and Nagarjunasagar (Andhra Pradesh). Under this Central sector programme, assistance is provided to States for creation of marketing complexes and certain ancillary facilities such as link roads and storage. Other items include land shaping and levelling, provision of irrigation outlets, field channels and drainage and water scheduling for crop requirements in order to make optimum use of water and to maximise farm income through proper crop sequence. During 1970-71, the programme will be taken up in the Rajasthan Canal area and Kangsabati command areas in addition to continuing it in the areas taken up during 1969-70. A provision of Rs. 1.60 crores has been made in the Central sector which is in addition to the provision made by some States.

4.49. A Central sector scheme of desert development has been formulated for taking up pilot projects involving schemes of soil conservation, afforestation, minor irrigation and agricultural development in the arid regions of Gujarat, Haryana and Rajasthan. The scheme was initiated in Gujarat and Harvana during 1969-70, and will get into full swing during 1970-71.

4.50. In addition to the outlays included in the Annual Plans of the States, the Central Government has provided a sum of Rs. 25 crores for rural works in the budget for 1970-71. It is intended to spend the bulk of Rs. 25 crores in areas which are prone to drought so as to generate employment in the rural sector. The individual schemes of rural works thus drawn up will be integrated on the one hand with general programmes of agricultural development in the areas concerned and, on the other, with specific programmes of development for submarginal farmers

and agricultural labour. A number of States have also made provision for rural works. During 1969-70, Madhya Pradesh, Mysore, Tamil Nadu, Punjab, Uttar Pradesh and West Bengal made provision aggregating Rs. 178 lakhs for these programmes. A similar provision has been made by a number of States during 1970-71.

II. Land Reforms

4.51. Intermediary tenures have been virtually abolished Legislation is being undertaken for extending the provisions of the Bihar Land Reforms Act regarding abolition of zamindaries to lands which had been acquired under the Land Acquisition Act 1894 for companies, such as lands held by Tatas near Jamshedpur. However, certain nonryotwari tenures still remain. It has been decided to abolish the remaining intermediary tenures by 1970-71.

Tenancy Reform

4.52. With a view to conferring complete security to every bargadar (share cropper) in West Bengal in respect of at least a minimum holding, conferring on him a heritable right of cultivation and increasing his share of the produce from 60 per cent to 75 per cent in cases where the landowner does not supply plough, cattle and other inputs, the West Bengal Land Reforms Act was amended in July 1970 by a President's enactment. In Assam and Bihar, Bills have been introduced for conferring further rights on the share-croppers and under-raiyats.

4.53. In some States, the statutory rent is still high. It is proposed to bring it down to the level recommended in the Third Plan, *i.e.* to one-fourth or one-fifth of the gross produce.

4.54. It is proposed to accord some priority to the preparation and revision of record-of-rights of tenants ansd sub-tenants including the share-croppers in areas to be covered by projects under the Small Farmers' and the Marginal Farmers' Development Agency.

Ceiling on Land holdings

4.55. Consequent on the Chief Ministers' Conference on Land Reforms in November 1969, legislation has been enacted for modification of ceiling provisions in Kerala, Tamil Nadu and Rajasthan. A proposal is under consideration in West Bengal for making ceiling applicable to the aggregate area of land held

by all the raiyats in a family, reducing the level of ceiling and relating it to the class of land, and reviewing provisions relating to exemptions. A Bill has been introduced in Assam for reduction of ceiling limit from 50 to 25 acres. In Uttar Pradesh, a reduction in ceiling has been under active consideration of the State Government. Proposals are also being finalised for revision of the ceiling provisions in Tripura.

4.56. Special efforts are also being made by the State Governments to expedite taking possession of and distribution of surplus vested lands to landless agricultural workers, including weaker sections of the community.

Consolidation of Holdings

4.57. In the State Plans for 1970-71 provision has been made for continuing the programmes of consolidation of holdings. Stress will be laid on the irrigated areas where it is likely to bring in better results.

4.58. A Chief Ministers' Conference, to be held in September 1970, will discuss various problems of land reforms and its implementation. This will be followed by an all-India seminar on Land Reforms Implementation scheduled to be held in October 1970 at which the State revenue officials and others will participate. A Central Committee on Land Reforms is being constituted under the chairmanship of the Minister of Food, Agriculture, CD and Cooperation with the Deputy Chairman and Member (Agriculture), Planning Commission, among others, as members. It is expected to assist the State Governments and Union Territories in the formulation of their proposals, enactment of suitable legislation, and for speedy and effective implementation of measures relating to land reforms.

ANNEXURE 4.1

Targets of Area under High Yielding Varieties—1970-71

(thousand hectares)

sl. no.	state	paddy	wheat	maize	jowar	bajra	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	599	40	45	81	73	838
2.	Assam	152	16	9	..	..	177
3.	Bihar	405	567	81	[1]	[1]	1053
4.	Gujarat	81	49	12	6	405	553
5.	Haryana	30	450	10	..	214	704
6.	Jammu and Kashmir	132	61	12	..	3	208
7.	Kerala	334	..	..	..	..	334
8.	Madhya Pradesh	81	222	29	20	12	364
9.	Maharashtra	245	205	13	814	567	1844
10.	Mysore	156	70	102	218	50	596
11.	Nagaland	Neg.	Neg.	..	..	..	Neg.
12.	Orissa	269	..	..	..	..	269
13.	Punjab	101	1499	81	..	101	1782
14.	Rajasthan	12	344	40	12	223	631
15.	Tamil Nadu	1518	..	9	12	80	1619
16.	Uttar Pradesh	689	1863	101	18	28	2699
17.	West Bengal	810	405	..	..	..	1215
18.	Union Territories	45	85	15	..	15	160
19.	*All-India*	5659	5876	559	1181	1771	15046

[1]less than 1000 hectares.

ANNEXURE 4.2

Targets of Area under Multiple Cropping

(Additional area in '000 hectares)

sl. no.	state	1970-71 target
(0)	(1)	(2)
1.	Andhra Pradesh	200
2.	Assam	40
3.	Bihar	160
4.	Gujarat	92
5.	Haryana	160
6.	Jammu and Kashmir	19
7.	Kerala	10
8.	Tamil Nadu	81
9.	Maharashtra	40
10.	Madhya Pradesh	120
11.	Mysore	100
12.	Orissa	340
13.	Punjab	168
14.	Rajasthan	200
15.	Uttar Pradesh	364
16.	West Bengal	130
17.	Union Territories	16
18.	*All-India*	2240

ANNEXURE 4.3

Targets of Area under Minor Irrigation

(Additional area in '000 hectares)

Sl. no.	State	1970-71 target
(0)	(1)	(2)
1.	Andhra Pradesh	72.00[1]
2.	Assam	39.35
3.	Bihar	148.00
4.	Gujarat	112.00
5.	Haryana	56.00
6.	Jammu and Kashmir	12.00
7.	Kerala	20.00
8.	Madhya Pradesh	79.00
9.	Maharashtra	174.10
10.	Mysore	23.20
11.	Nagaland	1.40
12.	Orissa	23.20
13.	Punjab	158.00
14.	Rajasthan	60.35
15.	Tamil Nadu	24.30
16.	Uttar Pradesh	671.00
17.	West Bengal	82.00
18.	Union Territories	12.00
19.	*All-India*	1768·00

[1]Estimated

ANNEXURE 4.4

Targets of Soil Conservation on Agricultural Land

(Additional area in 000 hectares)

sl. no.	state	1970-71 target
(0)	(1)	(2)
1.	Andhra Pradesh	36[1]
2.	Assam	6
3.	Bihar	11
4.	Gujarat	81
5.	Haryana	12
6.	Jammu and Kashmir	1
7.	Kerala	5
8.	Madhya Pradesh	200
9.	Tamil Nadu	39
10.	Maharashtra	425
11.	Mysore	82
12.	Nagaland	1
13.	Orissa	17
14.	Punjab	15
15.	Rajasthan	37
16.	Uttar Pradesh	211
17.	West Bengal	7
18.	Union Territories	5
19.	*All-India*	1191

[1]Estimated

ANNEXURE 4.5

Targets of Consumption of Nitrogenous, Phosphatic and Potassic Fertilizers[1]

(Nutrients in '000 tonnes)

sl. no.	state	nitro-genous	phos-phatic	potassic
(0)	(1)	(2)	(3)	(4)
1.	Andhra Pradesh	300.0	100.0	9.0
2.	Assam	6.5	3.0	2.5
3.	Bihar	85.0	30.0	14.0
4.	Gujarat	91.9	39.0	6.5
5.	Haryana	65.0	7.5	3.0
6.	Jammu and Kashmir	5.0	1.3	0.6
7.	Kerala	36.0	24.0	24.0
8.	Madhya Pradesh	47.0	22.0	4.0
9.	Maharashtra	120.0	38.0	11.0
10.	Mysore	100.0	40.0	19.0
11.	Orissa	27.0	7.5	3.7
12.	Punjab	180.0	31.0	12.0
13.	Rajasthan	36.0	10.0	2.2
14.	Tamil Nadu	180.0	60.0	50.0
15.	Uttar Pradesh	350.0	110.0	70.0
16.	West Bengal	50.0	19.8	14.6
17.	Total-states	**1679.4**	**543.2**	**246.1**
18.	Total-union territories including Nagaland and for Plantation Crops	46.6	20.8	5.9
19.	*All-India*	**1726.0**	**564.0**	**252.0**

[1]As agreed to by the States during Zonal Conferences on Fertilizers held during February-March, 1970.

ANNEXURE 4.6

Target of Area under Plant Protection

[1]Area (Gross) in thousand hectares

sl. no.	state	1970-71 target
(0)	(1)	(2)
1.	Andhra Pradesh	7200
2.	Assam	120
3.	Bihar	2320
4.	Gujarat	510
5.	Haryana	1900
6.	Jammu and Kashmir	60
7.	Kerala	970
8.	Madhya Pradesh	2000
9.	Maharashtra	6440
10.	Mysore	2280
11.	Nagaland	8
12.	Orissa	605
13.	Punjab	3120
14.	Rajasthan	2900
15.	Tamil Nadu	3765
16.	Uttar Pradesh	6075
17.	West Bengal	1600
18.	Union Territories	442
19.	*All-India*	42315

[1]Includes the area under following measures:
(*i*) Seed treatment (*ii*) Weed Control (*iii*) Prophylactic Spraying (*iv*) Rat Control (*v*) Control of Epidemics.

CHAPTER 5

ANIMAL HUSBANDRY, DAIRYING, FISHERIES AND FORESTS

I. Animal Husbandry

Cattle Development

During 1970-71, it is proposed to step up the cross breeding programme. With this end in view, it is proposed to import about 450 exotic animals consisting of Jersey, Holstein, Guernsey and Brown Swiss breeds. These animals will be distributed to various State and Central cattle breeding farms. Besides, it is proposed to establish a Central Jersey Cattle breeding farm at Koraput in Orissa for which about 300 animals will be obtained from Australia under the Colombo Plan. This farm, when fully established, would produce progeny tested bulls, suitable under Indian conditions for cross breeding.

5.2. For preserving high quality semen and to ensure economy in breeding operations by reducing the number of bulls, the technique of frozen semen is proposed to be adopted. Accordingly, equipment worth Rs. 7 lakhs will be imported for the establishment of frozen semen banks at Hessarghatta (Mysore), Poona (Maharashtra) and in Andhra Pradesh.

5.3. Forty intensive cattle development projects were established in different parts of the country by March 1970. It is proposed to initiate the establishment of six new intensive cattle development projects and 10 key village blocks during 1970-71. Besides, five existing intensive cattle development projects and eight key village blocks will be expanded during the year. The four intensive cattle development projects started for meeting the requirements of the Delhi Milk scheme will be continued with expanded scope of activities.

Feed and Fodder

5.4. With a view to supporting the fodder development programme, forage demonstration stations on regional basis were organised as a Central scheme at Kalyani, Hissar and Ankleshwar during 1969-70. Selction of sites for similar stations in other agro-climatic regions is in progress and two more stations are proposed to be set up during 1970-71. For supplying balanced feeds, three feed compounding factories were set up in Gujarat

and two in Maharashtra during 1969-70. Setting up of a similar feed compounding plant has been taken up in Kerala which will start operating during 1970-71. To popularise conservation of seasonal surpluses of fodder, silage making will be intensified. The National Seeds Corporation will continue the production of seeds of fodder crops like berseem, oats, jowar, lucerne and cow-peas for distribution to cultivators.

Sheep and Wool

5.5. To produce quality stud rams of important exotic breeds, two large sheep breeding farms were established at Hissar and in Jammu and Kashmir during 1969-70. At the Centrally administered sheep farm at Hissar, 1000 acres of land, out of a total of 7000 acres will be brought under cultivation to raise sheep during 1970-71. The aim of this programme is to produce better types with finer and heavier fleeces. Similarly, 1000 acres of land out of a total of 7000 acres would be developed for pasture at the Centrally sponsored farm at Verinag in Jammu and Kashmir. Preliminary steps for the establishment of two new Centrally sponsored sheep farms in Andhra Pradesh and Mysore will also to be taken. It is further proposed to establish a large sheep breeding farm to be run by a company which will be formed by the Government of Gujarat and the Indian Woollen Mills Federation. The objective of the farm is to facilitate the production of fine wool for meeting the demand of the participating woollen industries.

5.6. In order to meet the needs of various sheep breeding farms, 3500 sheep of Rambouillet breed and 1000 sheep of Russian Merino breed are to be imported during the year 1970-71. The Government of Australia will be providing some Corriedale sheep for the Central Sheep Farm at Hissar under Colombo plan.

Poultry Development

5.7. The intensive egg and poultry production-*cum*-marketing centres which form the core of the future poultry development programme will be expanded in 1970-71. Ten new centres will be started during the year, raising their total number to 110. It is also proposed to increase the handling capacity of the poultry dressing plant at Chandigarh from 500 at present to 1000 broilers a day during 1970-71.

5.8. Government have set up a random sample laying test unit at Bangalore with a view to identifying and locate genetically

superior strains of poultry in the country. The first test has been made and further tests will be conducted during the year. Another important programme envisaged is that of importing day old ducklings from U.K. for breeding and further propagation.

Animal Health

5.9. A scheme for the establishment of animal quarantine and certification service in India has been included in the Fourth Plan. It aims at effectively preventing introduction of contagious and infectious diseases in the country through the imported livestock and livestock products and to issue health certificates for livestock and livestock products meant for export. This scheme is of special importance in view of the large scale importation of exotic animals for cross breeding programme in the Fourth Plan. Against the Plan target of 5 quarantine stations, it is proposed to initiate the establishment of an animal quarantine and certification service Station at Delhi during 1970-71.

5.10. Mass vaccination programme will be undertaken in Kerala, Mysore and Tamil Nadu and follow up work executed in others under the Rinderpest Eradication Programme. It is proposed to intensify these measures along the inter-State borders to reduce the incidence of the disease. The production programme relating to tissue culture vaccine against rinderpest and Foot & Mouth disease will be sought to be stepped up at Indian Veterinary Research Institute, Izatnagar (Bareilly).

Slaughter Houses

5.11. It is proposed to set up corporate bodies to develop slaughter houses in 14 towns during the Fourth Plan period. During 1970-71, the establishment of a modern slaughter house at Bangalore has been approved and is likely to be taken up. In addition, preliminary investigations have been carried out for such a project at Madras is also likely to be initiated during the year.

Hide flying and carcass utilisation

5.12. To ensure fuller utilisation of fallen animals and slaughter house waste for the production of stock feed as well as manure, it is proposed to initiate during 1970-71 the setting up of 4 carcass utilisation centres at Bangalore, Koothattukulam, Srinagar and Indian Veterinary Research Institute, Izatnagar (Bareilly). The training-*cum*-production centre at Bakshi-ka-Talab, Lucknow will continue to impart training in hide-flaying, curing and carcass utilisation, tanning and foot wear and leather utilisation.

II. Dairying

5.13. The number of dairy plants in operation by the end of 1969-70 were 95 units comprising 54 liquid milk plants, 5 milk product factories, 3 creameries and 33 pilot milk schemes. At present, as many as 36 dairy plants including pilot milk schemes are under various stages of implementation. It is proposed to complete and commission six of these dairy plants during 1970-71. It is also proposed to take up installation of four new dairy plants during the year.

5.14. It is expected that the average daily throughput of milk of all dairy plants would increase to 22 lakh litres as against 20 lakh litres at the end of 1969-70. Steps are being taken in regard to selection of site, acquisition of land, preparation of building plans, and estimation of costs. It is proposed to import dairy equipment, machinery and spares worth about Rs. 51.25 lakhs during the year for plants under erection, as well as for existing plants.

5.15. In the Central sector, the Delhi Milk scheme made headway in respect of procurement, distribution of milk, as also in the implementation of the expansion programme. On an average 1.95 lakh litres of milk were procured daily during the period from April 1969—February 1970. As the scheme aims at serving a large part of milk requirements of Delhi city, steps are being taken to expand the Milk scheme for handling up to 3,00,000 litres of milk daily. To meet the requirements of additional milk, it is proposed to set up three new milk collection and chilling centres at Bhadus and Punhana in Haryana and Mahajan in Rajasthan during 1970—71. Action is also contemplated to establish a balancing station at Bikaner. Arrangements will be made for the procurement of 35 milk vans and 10 road milk tankers during the year. The building and equipment of the spray-drier plant is also likely to be completed during 1970—71.

Dairy Corporation

5.16. During 1969-70, a significant development was the signing of an operational agreement between Government and the World Food Programme for a project relating to milk marketing and dairy development. The project envisages substantial expansion of the existing public sector dairies in the metropolitan cities of Bombay, Calcutta, Delhi and Madras and programmes for production and collection of additional milk in the milkshed areas falling within the area of 10 States and the Union Territory of Delhi. During 1970-71, the Indian Dairy Corporation which has been registered as a public company in pursuance of the

project is expected to receive 10,500 tonnes of skimmed milk powder and 3,500 tonnes of butter oil from the World Food Programme. These will be sold by the Corporation to the four public section dairies at prices equivalent to the prices paid for indigenous liquid milk. The funds generated by the Corporation in 1970-71 are estimated at Rs. 7.81 crores. The programmes proposed to be undertaken during the year are expansion of the four existing dairy plants, erection of new plants, increasing milk production by provision of technical inputs, organisation of rural procurement of milk, milk collection and chilling centres, balancing milk plants and project planning.

Research and Education

5.17. During 1970-71, it is proposed to carry out all India coordinated studies on specialised dairy farming in relation to high yielding varieties of cereals and cash crops, cost of chilling and transportation of milk to city dairies, studies on the technological and economic problems of operation in liquid milk plants and developing techniques on the economic methods of utilisation of surplus or sub-standard milk. Studies will also be undertaken on the basic problems on the bacteriological and chemical quality of milk and milk products, development of milch breeds by cross breeding of Indian cattle with the exotic ones and development of techniques for the production of cheese, evaporated milk, khoya, milk powder, sodium caseinate and dry ice cream mixes.

III. Fisheries

5.18. For the development of inland fisheries, a large number of schemes have been formulated in the State sector of the Plan. These schemes relate to development and exploitation of reservoirs, intensification of fish culture, reclamation of fallow waters, development of riverine fisheries, improvement of village ponds for fish culture, fish seed production through river collections, induced breeding and bundh breeding, and construction of nurseries. It is also proposed to undertake a pilot scheme of fish culture in reclaimed brackish water swamps. The scheme has been formulated considering the potentials of development of fisheries in the Sunderbans area comprising of swamps, estuary and part of the Bay of Bengal. The programme envisages conversion of swamps into fish farms, introduction of mechanised boats for fishing in the estuary and large vessels for fishing in the Bay of Bengal. The budget provision for this scheme works out to Rs. 1.25 lakhs for 1970-71.

Development of Marine Fisheries

5.19. Emphasis will be laid during the year on mechanisation of fishing crafts, introduction of small mechanised boats for fishing in in-shore areas and operation of medium sized vessels for the exploitation of the off-shore and deep sea areas. Under mechanisation of fishing boats, it is envisaged to introduce 820 boats during 1970-71. These would be largely in Kerala, Maharashtra, Tamil Nadu and Gujarat.

5.20. In the marine sector, off-shore and deep sea fishing had not received adequate attention so far due to non-availability of requisite number of fishing trawlers, insufficient facilities of storage and distribution and lack of information on fishing grounds. These shortcomings are to be rectified during 1970-71. For the first time, commercial fishing is proposed to be extended to the off-shore regions on an appreciable scale. Thirty trawlers are being imported for off-shore fishing. The major portion of the requirements of fishing vessels will be met by indigenous construction. Since the cost of indigenously constructed vessels is higher than that of imported ones, a scheme has been approved for the purpose of providing subsidy on the capital cost of indigenously constructed fishing vessels. The budget provision for this purpose is Rs. 5 lakhs for 1970-71.

5.21. Twenty-two fishing vessels to replace the condemned ones are on order with the two consortia of ship builders for this programme. Some of these vessels have already been delivered and the remaining are expected to be delivered in 1970-71. It is further proposed to order two vessels for strengthening the Central Exploratory Organisation. Additional off-shore and deep sea fishing stations are proposed to be established at Calcutta, Port Blair and Kandla during the year.

5.22. A notable development in recent years has been the participation of institutional finance, e.g., Agricultural Refinance Corporation, the State Bank of India and other commercial banks, in providing capital for this programme. Since a recent F.A.O. study has revealed that the economics of mechanised fishing are satisfactory, steps were taken to reduce the subsidy under the scheme, so that these finances could be utilised for the introduction of a larger number of vessels in the programme.

5.23. An exploration of pelagic fisheries is proposed to be initiated during 1970-71 with the participation of UNDP. The programmes of exploratory fishing, training, processing and marketing undertaken by the Indo-Norwegian project will continue.

5.24. Along with the preparation of project reports for providing landing and berthing facilities for fishing vessels in the major ports of Cochin, Visakhapatnam and Raychowk (Calcutta), construction of deep sea fishing harbours at Bombay, Madras and Tuticorin will be taken up. The pre-investment surveys of fish harbours under the UNDP assisted programme will be continued in Andhra Pradesh, Orissa, Tamil Nadu and Kerala.

Marketing, Processing and Storage

5.25. One of the serious handicaps in the development of fisheries is the absence of a proper marketing system. Fish marketing and processing are mostly in the hands of private enterprise. The Central Fisheries Corporation, which has been functioning since 1965, has not been able to make any significant impact. The position is being reviewed.

5.26. In addition to rephasing the operation of existing nine refrigerated rail vans, potential routes for operation of three more vans are under consideration.

Research

5.27. It is proposed to organise coordinated multi-disciplinary research projects on an area basis. The coordinated projects comprise (1) ecology and fisheries of fresh water reservoirs, (2) propagation and stocking of seed of air breathing fishes for culture in swamps, (3) composite culture of Indian and exotic fishes, (4) investigation on riverine carp spawn prospecting and collection techniques and (5) studies on marine prawn biology and resources. During 1970-71, a budget provision of Rs. 32 lakhs has been made to undertake these activities at the three existing research institutes. It is further proposed to set up extension wings in these institutes in order to disseminate effectively the results of research activities carried out there.

Education and Training

5.28. The Central Institute of Fisheries Education will continue training of fisheries personnel at post-graduate level. Besides, it is envisaged to strengthen the Institute by setting up a fresh water sub-centre and adding a 77 ft. training vessel. The Central Institute of Fisheries Operatives will continue to meet the manpower requirements of the off-shore and deep-sea fishing programmes.

IV. Forests

5.29. The implementation of various plantation schemes will continue to be the major developmental activity during 1970-71. The physical achievements during 1969-70 are as under:-

	Achievement 1969-70 (hectares)
(i) P'antation of quick-growing species	42,000
(ii) Economic plantations for industrial and commercial uses	41,000
(iii) Rehabilitation of degraded forests	19,000
(iv) Farm-forestry-cum-fuelwood plantations	12,000
	1,14,000

The overall progress in plantation acitivity is expected to be maintained during 1970-71. The yield from new plantations of quick growing and economic species are intended to supplement the future availability of timber and cellulosic raw materials for important forest-based industries.

5.30. In some States, there are inaccessible forests which have not been economically exploited so far because of lack of communication facilities. Improvements in forest communications are proposed to be provided in selected areas of this type. Intensive exploitation and rational utilisation of existing forest resources will be aimed at. Forest demarcation activity will be intensified in a number of States.

5.31. The schemes on pre-investment survey of forest resource and logging training centres originally taken up with assistance from UNDP or FAO will now be implemented by our own experts and personnel. A forest area of about 15,000 sq. kms. was surveyed during 1969-70 in Maharashtra, Andhra Pradesh and Jammu and Kashmir at an estimated cost of Rs. 25.81 lakhs. An outlay of Rs. 33.00 lakhs has been provided during 1970-71 in the Central Plan for taking up survey work in another 17,000 sq. kms. of forest area. Under the scheme 'Logging Training Centres', seven forest officers and private forest managers and 250 instructors were trained in various fields during 1969-70 at a cost of Rs. 4.43 lakhs. An outlay of Rs. 4.24 lakhs has been provided during 1970-71 in the Central sector for continuing the work further.

5.32. The programme of forestry research relating mainly to forest development, particularly to increase the productivity of forests and their rational utilisation by suitable treatment, will be intensified at the Forest Research Institute, Dehra Dun and its centres at Bangalore and Coimbatore. The Institute has successfully experimented on the use of bagasse and eucalyptus species for manufacture of pulp and paper. These schemes are proposed to be continued during the year 1970-71. The

new coordinated schemes of research relating to fast growing tropical pines and conifers, studies on nutritional aspects of eucalyptus, correlation of growth rate of eucalyptus species with quality of pulping, and investigations on propagation of bamboos and regeneration of high level conifers are also to be taken up in 1970-71. The allocation for 1970-71 for the Central research schemes is Rs. 15.00 lakhs as compared to the expenditure of Rs. 7.18 lakhs during 1969-70. Forest research programmes in States will also be intensified.

Nature Conservation and Wild Life

5.33. The deliberations of the International Union for Conservation of Nature and Natural Resources, which met in New Delhi in December 1969, have given considerable fillip to conservation of nature and protection of wild life. The Indian Board for Wild Life has been reconstituted recently and has made a number of recommendations to the States for their implementation. The wild life wing in the Union Department of Agriculture is being strengthened, while a special wing has been opened for wild life in the Union Department of Tourism to attract foreign tourist traffic. An expert committee has been constituted under the Indian Board for Wild Life which will *inter alia*, examine the existing national parks and wild life sancturies and suggest suitable measures for their development and improvement. It is envisaged that this committee would advise on new national parks and wild life sancturies in suitable areas, formulation and adoption of a national policy on wild life conservation and protection of rare species. The committee has concluded its deliberations. States and Union Territories which have declared the tiger a protected animal are Goa, Gujarat, Kerala, Mysore, Rajasthan and Tamil Nadu; States which have declared moratorium on tiger shooting for five years from 1st July 1970 are Andhra Pradesh, Assam, Himachal Pradesh, Orissa and Tripura, whereas Uttar Pradesh and Maharashtra have declared such moratorium for 3 years and 2 years respectively. Implementation of wild life protection laws and rules, by maximising public cooperation through village panchayats, is also aimed at.

CHAPTER 6

FOOD AND NUTRITION

I. Food Policy and Administration

During 1969-70, it is estimated that the foodgrains production has touched a new high level of 99.5 million tonnes exceeding the previous record production of 95.1 million tonnes achieved in 1967-68 by 4.4 million tonnes. The increased level of production has brought about a large measure of stability on the food front. Market availability of foodgrains remained generally easy during 1969 and the seasonal fluctuations in prices were by and large normal. Internal procurement of foodgrains were over 6 million tonnes in 1969 and imorts of foodgrains were reduced further from 5.7 million tonnes in 1968 to 3.9 million tonnes in 1969. The off-take from the public distribution system declined from 10.4 million tonnes in 1968 to 9.6 million tonnes in 1969. During 1970-71, the target of foodgrains production has been placed at 106 million tonnes.

Public Distribution

6.2. The following table indicates the commodity-wise break-up of the public distribution of foodgrains during 1965-69:

Table 6.1 : *Public Distribution of Foodgrains*

(million tonnes)

	1965	1966	1967	1968	1969
rice . . .	3.6	4.1	3.0	3.5	3.5
wheat . . .	5.9	8.2	7.4	5.7	5.2
coarse-grains . .	0.6	1.8	2.8	1.2	0.9
total .	**10.1**	**14.1**	**13.2**	**10.4**	**9.6**

The quantity for public distribution during 1970-71 is likely to be of the order of 9 million tonnes.

Procurement

6.3. Intensive procurement operations were continued in 1969. The total procurement of foodgrains was about 6.26 million tonnes as against 6.77 million tonnes in 1968. The shortfall was mainly in the procurement of coarse-grains and was

due to the withdrawal of restrictions on their movement. The following figures indicated the progress of procurement since 1965, cereal-wise:—

TABLE 6.2 : *Progress of Procurement*

(million tonnes)

year	rice	wheat	other grains	total foodgrains
1965	2.95	0.37	0.71	4.01
1966	3.10	0.22	0.69	4.01
1967	2.78	0.78	0.90	4.46
1968	3.37	2.35	1.05	6.77
1969	3.47	2.41	0.38	6.26

6.4. Government after considering the recommendations of the Agricultural Prices Commission on Price Policy for Rabi foodgrains for 1970-71 and the views of the Chief Ministers have decided that all possible effort will be made to achieve the procurement target of 3.7 million tonnes of wheat recommened by the Agricultural Prices Commission. The following table indicates the procurement of wheat during the marketing year (April to March) 1968-69 and 1969-70 and the targets of procurement recommended by the Agricultural Prices Commission for the different States :

TABLE 6.3 : *Procurement of Wheat*

('000 tonnes)

State	procurement		target recommended by Agri. Prices Commission
	1968-69	1969-70	
(1)	(2)	(3)	(4)
Bihar	..	10	50
Gujarat	..	..	10
Haryana	214	271	350
Jammu and Kashmir	11	4	10
Madhya Pradesh	101	19	100
Maharashtra	..	..	10

(1)	(2)	(3)	(4)
Mysore	..	..	10
Punjab	1358	1874	2500
Rajasthan	70	5	75
Uttar Pradesh	516	199	500
West Bengal	..	..	75
Others	3	3	10
All-India	2273	2385	3700

The decision on the procurement of rice will be taken during the course of the year.

Zonal Restrictions

6.5. Ever since the bumber harvest of 1967-68, Government have been constantly reviewing the policy regarding zonal restrictions before each harvest. The movement of barley, gram and pulses is free throughout the country now. Restrictions on coarse-grains have been withdrawn in most of the major producing areas. In respect of wheat, the entire country, excepting the statutorily rationed areas of West Bengal and Maharashtra, is one zone. The zonal restrictions on rice will be reviewed before the next kharif harvest.

Buffer Stock

6.6. During 1968-69, a start was made towards building up of a buffer stock of foodgrains. At the end of March 1969, there was a closing stock of 4.5 million tonnes of foodgrains with the Central and State Governments. At the end of March 1970, the total stock of foodgrains in the Central Pool and with the State Governments was 4.2 million tonnes. This included both operational and buffer stocks. The extent of buffer-stock at the end of the year 1970-71 will depend upon the procurement, production and imports of food-grains during the year.

Food Corporation of India

6.7. The activities of the Food Corporation at present extend throughout the country. The Corporation is playing a pivotal role in the procurement and distribution of foodgrains as well as in the stabilisation of prices. The estimated purchases, sales

and stocks of the Corporation in 1970-71, along with the comparative data for 1969-70, are given below:

	1969-70 (estimated)		1970-71 (estimated)	
	quantity (lakh tonnes)	value (Rs. crores)	quantity (lakh tonnes)	value (Rs. crores)
Purchase	94.33	733.46	95.20	742.88
Sales	85.68	734.90	84.98	748.31
Closing stock	39.80	324.49	48.03	389.24

II. Nutrition

6.8. The Plan envisages the commencement of several scheme for promoting the production of low cost nutritious foods for mass consumption and to replace in due course what is received as aid from abroad. It is also intended to improve the organisational frame-work to make it more effective in implementing nutrition programmes. An outlay of Rs. 45.18 crores has been provided in the Fourth Plan for the nutrition programmes at the State and in the Centre. An outlay of Rs. 4.84 crores has been provided in the Annual Plan for 1970-71. The progress of nutrition schemes during 1969-70 was slow since no scheme of the Department of Health and Family Planning and that of the Department of Social Welfare could be taken up during that year. Similarly progress on the Composite Programme for Women and Pre-school Children of the Department of Community Development and Balahar of the Department of Food was not up to the mark. The programmes may not reach satisfactory levels of performance even in 1970-71 on account of the low outlays proposed by the departments. The schemewise outlay on nutrition programmes for 1970-71 is at Annexure 6.1.

Unconventional Protein Foods

6.9. Among the schemes intended for promoting the production of low cost nutritious foods for mass consumption and to replace in due course aid received from abroad, mention may be made of groundnut flour and soyabean products, balahar, weaning foods, protein isolate toned milk and cotton seed flour. For the production of groundnut flour and soyabean products, which are rich in protein and are essential components of balahar, two production units have been in operation at Bombay and Coimbatore with UNICEF assistance and in collaboration with private industries.

6.10. The production of balahar was initially taken up by the Department of Food in 1967 and a total quantity of 500 tonnes was produced and supplied to scarcity areas in Bihar. Consumer acceptability studies have revealed that balahar distribution could be taken up on a wider scale. During 1969-70, 8500 tonnes of balahar was produced which was substantially below the target. The quantity of balahar expected to be distributed in 1970-71 is 30,000 tonnes. Balahar will also be used in the new scheme of nutritional feeding of pre-school children in tribal areas and slum areas of metropolitan cities.

6.11. Under the scheme for production of weaning foods, financial support is to be accorded to the Kaira Cooperative Union. The Union has received production equipment from UNICEF and will receive the essential raw materials as aid from abroad. The Kaira Union will also carry out market studies and other promotional measures. During 1969-70 production of Bal-Amul was initiated and consumer acceptability trails were undertaken. For 1970-71 an outlay of Rs. 15 lakhs has been provided for the scheme on which the expenditure was Rs. 5 lakhs during the previous year.

6.12. A pilot plant for protein isolate toned milk has gone into production of lactone at Bangalore. Work is now in progress in improving its quality. Trials are being made to produce cotton seed flour for human consumption and the National Institute of Nutrition, Hyderabad, has been doing some work for eliminating the adverse effects of Gossypol from cotton seed flour.

Fortification Programmes

6.13. For raising the nutritional standards of the population schemes for fortification of foods of common consumption, such as wheat flour, salt and bread have also been taken on hand by the Department of Food. Pilot studies have been undertaken to fortify wheat products with calcium, iron, vitamins and protein concentrates. Similarly, experiments are being conducted in the fortification of salt with calcium and iron at the Central Salt and Marine Chemicals Research Institute, Bhavnagar, in collaboration with the National Institute of Nutrition, Hyderabad.

Measures for Vulnerable Groups

6.14. In planning for nutritional feeding, pregnant women, infants and young children have obvious priority. Special stress has been laid in the Plan on schemes for the benefit of vulnerabl e

groups. Some of the schemes for the purpose are the Applied Scheme and Composite Programme for Women and Children of the Department of Community Development, Mid-day Meals Programme of the Ministry of Education and Nutrition Feeding of pre-school children and special feeding programme for children in tribal areas and slum areas of the Department of Social Welfare.

6.15. The Applied Nutrition Programme of the Department of Community Development was extended over 94 new blocks during 1969-70. During 1970-71 it will be extended to another 91 blocks. This will bring the effective number of blocks at the end of 1970-71 to 705. Apart from Central assistance, State Governments provided funds for the production components of Applied Nutrition Programme to the extent of Rs. 3.29 crores during 1969-70. The corresponding amount for 1970-71 is expected to be Rs. 3.60 crores. In the Central Sector the Annual Plan has a provision of Rs. 180 lakhs for the programme.

6.16. The Composite Programme for Women and Pre-school Children launched during 1969-70 provides for nutritional education in areas not covered under the Applied Nutrition and Family and Child Welfare Programmes. The scheme contemplates a package of activities of joint endeavour on the part of Central and State Governments. Against the likely outlay of Rs. 12.35 lakhs on this scheme during 1969-70, a provision of Rs. 29.00 lakhs has been made in the Central Budget for 1970-71. The counterpart activities to be undertaken by the State Governments which had not progressed sufficiently so far are expected to develop more adequately during 1970-71. From 1970-71 such counterpart activities on the part of State Governments become a pre-condition for the continuance of Central assistance under the programme.

6.17. At present about 10 million school children and one million pre-school children are being fed under the mid-day meal programme undertaken by the State Governments. The feeding material for this scheme is generally supplied as aid from abroad. For this scheme an outlay of Rs. 62.89 lakhs has been proposed for 1970-71 as against the expenditure of Rs. 51.77 lakhs in 1969-70.

6.18. The Department of Social Welfare is implementing a scheme of nutrition feeding of pre-school children through Balwadis for the age-group 3—6 years. A provision of Rs. 20 lakhs has been made for this scheme for 1970-71 during which about. 1.20 lakh beneficiaries would be covered. Under this scheme, generally

foods which are locally available would be used except in drought affected areas where processed foods, such as Balahar, would be distributed.

6.19. A special feeding programme for pre-school children in 0—3 years age group in tribal areas and slum areas of metropolitan cities to be undertaken by the Department of Social Welfare is being formulated. During 1970-71, about 3.75 lakh children of tribal areas and about the same number in slum areas will be covered under this scheme. An outlay of Rs. 4 crores has been provided or the purpose for 1970-71 as part of the non-Plan expenditure.

Fulfilment of Special Needs and Requirements

6.20. Among the schemes which seek to make a beginning with the fulfilment of the special needs and requirements of specified groups of people, mention may be made of prophylaxis against nutritional anaemia and control of blindness caused by vitamin A deficiency. The scheme of prophylaxis against nutritional anaemia among mothers and children has been formulated to provide preventive measures against these diseases. This scheme will be administered through maternity, child welfare and family planning centres. The principal items of consumption are ferrous-sulphate (iron) and folic acid. The ferrous-sulphate is produced in the country whereas it will take some time to produce folic acid locally. During 1969-70, difficulties were experienced in preparing tablets of these two ingredients. Two private pharmaceutical firms have been engaged for preparing the anti-anaemia tablets and it is expected that they would become available some time during 1970-71. An outlay of Rs. 40 lakhs has been provided and about 30 lakhs beneficiaries are expected to be covered under this scheme during 1970-71.

6.21. A scheme for controlling blindness in children caused by vitamin A deficiency has been formulated in the Fourth Plan to cover 8 million children up to the age of 5 years in areas with high incidence of Keratomalacia (blindness). This scheme will be administered through primary health centres and sub-centres and concentrated doses of vitamin A will be administered to the deficiency groups. The scheme could not be implemented during 1969-70 as Vitamin A could not be procured in time. The requisite quantity of vitamin A has now been procured and an outlay of Rs. 8 lakhs has been provided for 1970-71. It is proposed to cover 16 lakh children under the scheme during the year.

ANNEXURE 6.1

Scheme-wise outlay for 1970-71 for Nutrition Programmes

(Rs. lakhs)

sl. no.	scheme	1970-71 outlay proposed
(0)	(1)	(2)
I.	*Deptt. of Health and Family Planning*	**48.50**
1.	feasibility tests of vitamin and mineral fortification of staple foods	0.50
2.	prophylaxis against nutritional anaemia in mothers and children	40.00
3.	Control of blindness in children caused by vitamin 'A' deficiency	8.00
II.	*Department of Community Development*	**211.60**
4.	applied nutrition programme	180.00
5.	composite programme for women and pre-school children	31.60
6.	nutrition education through mahila mandals	
7.	strengthening supervisory machinery for women's programmes	
8.	demonstration feeding	
9.	encouragement of economic activities by mahila mandals	
10.	training of associate women workers	
III.	*Department of Food*	**141.45**
11.	production of groundnut flour and soyabean products	1.00
12.	production of balahar and low cost protein foods	50.00
13.	production of weaning feed	15.00
14.	pilot plant for protein isolate and protein isolate toned milk	6.50
15.	fortification of wheat products	12.60
16.	fortification of salt	6.00
17.	audio-visual aids and publicity	1.50
18.	mobile food and nutrition extension units	7.00
19.	nutrition and dietary surveys	
20.	studies in acceptability of nutritious foods	
21.	formulation of low cost diet through linear techniques	
22.	community canning and fruit preservation centres	7.40
23.	production of peanut-butter	0.25
24.	institutes of catering technology and applied nutrition	18.00
25.	research scheme	1.00
26.	maize, pulses and millets processing	0.20
27.	nutrition education through commercial channels of Modern bakeries	15.00
IV.	*Department of Education*	**62.89**
28.	School feeding	62.89
V.	*Department of Social Welfare*	**20.00**
29.	nutrition feeding of pre-school children through balwadis	20.00
	Total—(I to V)	**484.44**

CHAPTER 7

COOPERATION AND COMMUNITY DEVELOPMENT

I. Cooperation

It is estimated that the cooperatives would advance short and medium term credit of the order of R . 565 crores during 1970-71 as against about Rs. 520 crores during 1969-70. Emphasis would continue to be laid during the year on the programmes of reorganisation of primary credit societies to form viable units, rehabilitation of weak central banks, effective recovery of overdues and reorientation and rationalisation of loaning policies and procedures for larger flow of credit to the small farmers. A pilot scheme for the provision of finance to primary credit societies by commercial banks in selected areas in five States where the Central cooperative banks are weak was introduced during 1969-70 as a temporary experimental measure. The operation of this scheme would be continued during year 1970-71. Simultaneously, programmes of rehabilitation of the concerned Central Cooperative Banks will be undertaken. The agricultural credit stabilisation fund maintained by cooperative banks would be further strengthened. A provision of Rs. 2 crores has been made in the Annual Plan for the purpose.

7.2. As regards long term loans, the total loaning programme by the land development banks is expected to be about Rs.150 crores during 1970-71. The land development banks are expected to raise resources of more than Rs. 140 crores during the year by floatation of debentures in the market. Apart from institutional investment from public sector institutions and commercial banks, State and Central Governments would be contributing to the debentures programme. A provision of Rs. 17 crores has been made towards the Central Government's contribution to the ordinary debentures programme in the Annual Plan of 1970-71 and the State Plans provide an equal amount. (Details are given in Annexure 7.1.)

Distribution and Manufacture of Inputs

7.3. Cooperatives are expected to distribute fertilisers of the value of Rs. 300 crores during 1970-71 as against Rs. 210 crores worth of fertilisers during 1969-70. To help the cooperatives to handle such large quantity of inputs, a provision of Rs. 3.5 crores has been made in the Annual Plan for the centrally-sponsored scheme of margin money for distribution of fertilisers.

7.4. The Indian Farmers' Fertiliser Cooperative Limited has finalised agreement with USAID for the establishment of fertiliser project in Gujarat. The project is designed to produce over 0.3 million tonnes of ammonia, about 0.4 million tonnes of urea and about 0.4 million tonnes of complex fertilisers per annum. The project, as finalised, would consist of two plants, one at Kandla for complex fertilisers and anoher at Kalol for production of urea and ammonia. The prime contracts for the project are expected to be completed and production work started during the course of the year. It is proposed to assist the setting up of 3 speed producers' processing-*cum*-sale Societies, 2 small scale workshops for fabrication of agricultural implements, 10 hire and service stations for tractors and agricultural machinery and 2 units for formulation of pesticides.

Marketing and Processing

7.5. In the field of cooperative marketing, the main emphasis would continue to be on consolidation of existing marketing structure. Organisation of new societies would be undertaken to a limited extent in new market centres. The marketing federations at the State and national levels would also be strengthened to provide financial support and effective guidance to the affiliated institutions. Technical and promotional cells have been created in nearly all State federations. These cells are to be expanded and made more broad-based by appointing larger number of experts in various fields of marketing, processing, storage and inputs. It is envisaged that the cooperatives would market agricultural produce of the value of Rs. 700 crores during 1970-71 as against the estimated value of Rs. 600 crores during 1969-70.

7.6. Cooperatives now account for nearly a third of the total sugar production and a sixth of the cotton ginned and processed in the country. The total paddy processing capacity of the rice mills in the cooperative sector is about one eigth of the marketable surplus of rice. By 1969-70, 89 cooperative sugar factories and 1577 other cooperative processing units had been organised or assisted. Besides this, 20 rice mills were modernised and 3 sugar by-products industrial units had been assisted. During 1970-71, it is proposed to provide financial assistance to additional 15 cooperative sugar factories and about 100 other processing units including modernisation of 20 rice mills and 3 sugar by-products units. Apart from the Plan assistance provided to the State Governments through the National Cooperative Development Corporation, a Central Sector scheme of provision of capital cost to processing units of medium and small size would be in operation. An amount of Rs. 1.25 crores has been provided in the

Annual Plan for this purpose. In order to enable the cooperative processing units to offer margin of security by raising adequate share capital, NCDC has recently formulated a scheme under which the State Governments' resources will be supplemented by NCDC from its own funds to the extent of 50% of the State assistance to the processing units in the form of share capital contribution as reimbursement outside their plan resources. In addition, NCDC has also formulated a scheme for providing assistance to the State Governments outside their plan resources for financing the processing units organised in the earlier years, for margin money needed for raising working capital. These schemes will be implemented from 1970-71 onwards.

Consumer Coopertives

7.7. The scheme of distribution of consumer articles in rural areas which was earlier a centrally sponsored scheme had been transferred to the State sector from 1969-70. The value of consumer articles distributed by cooperatives during 1969-70 is estimated at Rs. 300 crores. A target of Rs. 350 crores is envisaged for 1970-71.

7.8. The network of urban consumer cooperative stores now covers all urban centres with a population of 50,000 or above. During 1970-71, some of the existing central wholesale consumer cooperatives would be re-organised and strengthened with a view to building them up as large-sized multi-retail unit cooperative societies. Large retail outlets of the intermediate size are also proposed to be developed. Department stores would be set up in urban areas not yet covered.

Storage

7.9. The storage capacity in the cooperative sector which is estimated to have reached 2.9 million tonnes by the end of 1969-70, is proposed to be increased to 3.3 million tonnes by the end of 1970-71. Ten additional cold storage units are also expected to be assisted. This would bring the total number of cold storage assisted in the cooperative sector to 105 by the end of 1970-71.

Other Programmes of Cooperative Development

7.10. The activities of the urban cooperative banks would be expanded with a view to increasing their membership, deposit mobilisation and loans and advances. The Reserve Bank of India has recently extended a scheme of loans from its long term operation fund for share capital participation by State Governments in selected urban cooperative banks for financing of industries.

Education and Training

7.11. It is proposed to include specialised courses on audit, marketing, cooperative law and procedure and processing of agriculture procedure at the Vaikunth Mehta National Institute of Cooperative Management. It is estimated that 380 senior personnel would be trained in this Institute during 1970-71 in the various courses. In addition, about 2,800 intermediate personnel and 6,300 junior personnel would receive training in the 13 cooperative training colleges and 63 cooperative training centres. About 4,00,000 office bearers, members and youth and women are expected to receive peripatetic training under the member education scheme. Measures would be taken to improve the working of cooperative training colleges and cooperative training centres in the light of the recommendations of the working group and the report of the Programme Evaluation Organisation of the Planning Commission. It is also proposed to revise the member education scheme in the light of the recommendations of the Programme Evaluation Organisation.

Community Development and Panchayati Raj

7.12. Of the 5,265 Community Development Blocks into which the entire rural India has been delimited, 672 Blocks were in Stage-I, 2,275 in Statge-II and the remaining 2,318 blocks had passed on to post Stage-II phase. Allocations have been made in the Plans of the States for the C.D. Blocks during 1970-71, although in most cases the provisions are below the schematic requirements.

Pilot Studies on Growth Centres

7.13. As a part of studies on area planning, a centrally sponsored scheme for Pilot Research Project in Growth Centres with an outlay of Rs. 1.45 crores is being launched in the Fourth Plan. The scheme is designed to evolve a broad research methodology and pattern, for identifying growth centres and to indicate how the growth potential of these centres can be promoted through a comprehensive and scientific study of over-all development needs and to weave these centres meaningfully into the frame of the district plan, and thus help in the process of planning from below. Setting up of research and investigation cells in selected areas to identify potential growth centres and drawing up plans of infrastructure development are envisaged in the scheme. The base areas for the study are to be selected by the State Governments with reference to a list of visible symptoms of growth and other relevant data. A provision of Rs. 0.24 crores has been made

for the scheme during 1970-71 and 20 projects are intended to be set up in different parts of the country. For facilitating the implementation of the scheme, action has already been taken to set up a special cell in the Union Department of Community Development. Arrangements have also been made for imparting training to the personnel concerned with the proposed projects at the National Institute of Community Development, Hyderabad. It is contemplated that during 1970-71, three courses of 8 weeks' duration will be organised.

Orientation, Publicity and Literature

7.14. A provision of Rs. 0.426 crores has been made in the Annual Plan of 1970-71 for Central sector programmes under the Department of Community Development. The programmes will include orientation of village school teachers in community development, training of associate women workers, production of basic literature and literature for non-officials, prize competition schemes for the best gram sevaks, gram-sevikas and villagers, research through universities, sammelans and incentive awards to youth workers.

ANNEXURE 7.1

Targets for Annual Plan 1970-71—

(*i*) Short and Medium term loans by Primary Agricultural Credit Societies,
(*ii*) Loans by Land Development Banks,
(*iii*) Marketing of Agricultural produce and
(*iv*) Sales of urban consumer stores.

(Rs. crores)

s. no.	state	short and Medium term loans by Primary Agricultural Credit Societies	long term loans by land development banks	cooperative marketing of agril. produce	retail sales of urban consumer stores
(0)	(1)	(2)	(3)	(4)	(5)
1.	Andhra Pradesh	30.00	16.28	28.00	21.50
2.	Assam	2.80	0.26	14.00	3.60
3.	Bihar	17.00	7.88	11.00	25.00
4.	Gujarat	67.00	21.73	55.00	16.00
5.	Haryana	15.00	4.46	17.00	2.00
6.	Jammu and Kashmir	3.50	0.52	3.00	1.25
7.	Kerala	22.50	2.36	12.00	22.00
8.	Madhya Pradesh	49.30	7.88	22.00	11.00
9.	Maharashtra	110.00	24.88	180.00	46.00
10.	Mysore	32.00	8.92	35.00	36.00
11.	Orissa	15.50	5.78	4.00	3.80
12.	Punjab	65.00	7.67	95.00	6.00
13.	Rajasthan	18.00	3.31	7.00	6.50
14.	Tamil Nadu	42.00	15.44	25.00	55.00
15.	Uttar Pradesh	65.00	17.54	165.00	8.00
16.	West Bengal	8.00	2.36	12.00	35.00
17.	Union Territories	4.40	0.89	5.00	16.00[1]
	total	**566.00**	**148.16**	**690.00**	**314.65**

[1]Includes Rs. 1.2 crores for Nagaland.

CHAPTER 8

IRRIGATION AND FLOOD CONTROL

As in the preceding year, priority has been given in the Annual Plan for 1970-71 to the completion of the schemes which are in an advanced stage of construction. In some of the States comparatively small or no provision has been made for the new schemes because of an already full programme of continuing schemes, and in some cases because of new schemes not having been fully investigated and approved. Matching provisions have been made in respect of inter-State projects. Necessary provision has been made for survey, investigation and research programme in States.

8.2. An outlay of Rs. 180.84 crores has been provided for major and medium irrigation projects in 1970-71 against the Plan outlay of Rs. 142.42 crores in 1969-70. State-wise break-up of the outlay is given in Annexure 8.1. It is estimated that an additional potential of 0.64 million hectares would be created during 1970-71. The additional utilisation during this period is expected to be of about the same order. State-wise position in respect of potential created and its utilisation by the end of 1970-71 is shown in annexure 8.2.

Minor Irrigation

8.3. The financial ceiling for minor irrigation has been raised from Rs. 15 lakhs to Rs. 25 lakhs in the plains and Rs. 30 lakhs for hilly areas with effect from April 1 1970. The programme of minor irrigation schemes will be coordinated with rural electrification schemes for energising pump sets for tubewells. A provision of Rs. 92.1 crores has been made in 1970-71 for minor irrigation schemes against an outlay of Rs. 81.9 crores in 1969-70. State-wise distribution of the outlay is given in Annexure 8.3. In addition to this public sector outlay, institutional investments of the order of Rs. 135 crores for private minor irrigation works are expected during 1970-71 as against the anticipated investment of Rs. 115 crores during 1969-70. There will be, in addition, substantial private investment by the cultivators from their own resources. The bulk of the public sector outlay is proposed to be utilised for tubewells, storage and diversion projects and lift irrigation projects to provide irrigation facilities to small farmers who are not able to have irrigation arrangements of their own. Emphasis is being laid on preparation of compact area schemes

prepared after detailed surveys. It is estimated that the minor irrigation schemes to be implemented during 1970-71 from the public sector, institutional and private investment will irrigate 0.62 million hectares of new area. In addition they will provide irrigation to 0.31 million hectares of area going out of use from the existing irrigated area, and stabilise irrigation in 0.47 million hectares of irrigated area.

8.4. Rural electrification is an essential supporting programme in order that cheap power is available for lift irrigation. It is expected that the State Electricity Boards would make increasing use of institutional finance such as may be obtained from agencies, like the Rural Electrification Corporation, in addition to the Plan outlay. A total of 2.6 lakh pump sets are anticipated to have been energised in 1969-70. During 1970-71 also, 1.1 lakh pump-sets are expected to be energised with the outlay in the Plan and about 1.5 lakh from institutional investments.

8.5. Expansion of groundwater development programme calls for intensive coordinated effort for scientific investigation. Groundwater investigations were being carried out mainly by two agencies, namely, the Geological Survey of India and the Exploratory Tubewells Organisation. Some States have set up their own geo-hydrological units to carry out investigation to provide support to programmes of utilising groundwater resources. The States are expected to make further progress in this direction during 1970-71.

Flood Control

8.6. Substantial part of the benefits on account of flood control measures accrued to the States which are susceptible to frequent flood havocs like Assam, Bihar, Orissa, Uttar Pradesh and West Bengal. During 1969-70 besides these States, medium to high floods were experienced in Andhra Pradesh, Gujarat, Madhya Pradesh and Maharashtra. In Kerala, the problem of beach erosion is of an acute nature. About 70 KM of sea coast had been protected up to the end of 1969-70, including a length of 3 KM in 1969-70. The anticipated expenditure for 1969-70 on flood control drainage, anti-waterlogging and anti-sea-erosion measures is placed at Rs. 16.75 crores against the approved outlay of Rs. 13.13 crores for that year. For 1970-71, the outlay for this programme is Rs. 22.6 crores. The State-wise break-up of this outlay is given in Annexure 8.4. In Assam, the Brahmaputra Flood Control Board is being set up to tackle on a scientific basis the problem of recurring damage in the Brahmaputra Valley. The Brahmaputra Commission is also being set up to

investigate and execute the flood control schemes. Important flood control schemes such as Bagmati (cost Rs. 6.5 crores) and Mahananda embankment (cost Rs. 5.5 crores) in Bihar. and Dudda Basin (cost Rs. 2.68 crores) and Kaliaghya (cost Rs. 2.96 crores) in West Bengal, have been approved. Protection measures necessitated on account of erosion by Ganga in Uttar Pradesh and Brahmaputra in Assam would also be taken up during the Annual Plan.

8.7. For undertaking experimental dredging in the Brahmaputra river, it is proposed to procure dredgers. A provision of Rs. 172.5 lakhs has been made for this purpose in the Central Plan of 1970-71. The programme of setting up of flood forecasting centres to issue forecasts on a scientific basis will be extended during 1970-71 at an expense of Rs. 40 lakhs. It is also proposed to initiate the setting up of a national net work for the collection of basic hydrological data on the river basins for which an outlay of Rs. 48 lakhs has been provided in the Central Plan.

Plan outlays

8.8. The outlays at the Centre and in the States and Union Territories for 1970-71 and 1969-70 are given below:—

TABLE 8.1: *Plan Outlays on Irrigation and Flood Control*

(Rs. crores)

sl. no.	item	1969-70				1970-71			
		centre	states	union territories	total	centre	states	union territories	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	major and medium irrigation	2.12	140.10	0.20	142.42	3.00	177.71	0.13	180.84
2.	minor irrigation	2.00	78.68	1.24	81.92	2.42	88.43	1.34	92.09
3.	rural electrification	5.00	43.74	1.62	50.36	20.00	44.22	1.80	66.02
4.	flood control	0.31	11.34	1.48	13.13	2.17	18.63	1.81	22.61

8.9. A brief description of some of the important major irrigation schemes is given in Annexure 8.5.

ANNEXURE 8.1

Outlays on Major and Medium Irrigation Schemes in 1970-71

(Rs. crores)

sl. no.	states/union territories	1970-71
(0)	(1)	(2)
1.	Andhra Pradesh	19.95[1]
2.	Assam	1.51
3.	Bihar	20.68
4.	Gujarat	21.84
5.	Haryana	5.80
6.	Jammu and Kashmir	0.76
7.	Kerala	4.50
8.	Madhya Pradesh	10.50
9.	Maharashtra	26.80
10.	Mysore	11.20
11.	Orissa	4.57
12.	Punjab	3.41
13.	Rajasthan	17.47
14.	Tamil Nadu	4.85
15.	Uttar Pradesh	19.93
16.	West Bengal	3.94
	total—states	177.71
	Union Territories	
1.	Goa, Daman, and Diu	0.065[1]
2.	Pondicherry	0.064
	total—union territories	0.129
	Central Schemes	3.00
	grand total	**180.84**

[1]Includes for 'Flood Control' also.

ANNEXURE 8.2

Statewise position regarding creation of irrigation potential and its utilisation from major and medium irrigation schemes

('000 hectares gross)

sl.no.	state	irrigation from pre-plan scheme	benefits from plan schemes at the end of 1969-70 (anticipated)		benefits from plan schemes at the end of 1970-71 (target)		benefits to end of 1970-71 including pre-plan	
			Pot.	Utl.	Pot.	Utl.	Pot.	Utl.
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Andhra Pradesh	1676	842	713	913	793	2589	2469
2.	Assam	65	28	28	35	31	100	96
3.	Bihar	590	1527	852	1680	1019	2270	1609
4.	Gujarat	33	506	327	548	357	581	390
5.	Haryana	[2]	921	910	931	918	931	918
6.	Jammu and Kashmir	43	20	19	22	21	65	64
7.	Kerala	158	200	200	233	233	391	391
8.	Madhya Pradesh	512	436	201	460	270	972	782
9.	Maharashtra	279	391	245	440	291	719	570
10.	Mysore	308	515	448	526	471	834	779
11.	Orissa	455	708	625	757	660	1212	1115
12.	Punjab	1656[1]	692	688	700	688	2356	2344
13.	Rajasthan	320	750	630	804	675	1124	995
14.	Tamil Nadu	1141	320	310	328	325	1469	1466
15.	Uttar Pradesh	1991	1148	982	1234	1042	3225	3033
16.	West Bengal	440	700	650	730	682	1170	1122
	total	**9667**	**9704**	**7828**	**10341**	**8476**	**20008**	**18143**

[1]Included under Punjab.

[2]Includes for Haryana also.

ANNEXURE 8.3

Outlays on Minor Irrigation Schemes in 1970-71

(Rs. crores)

sl.no.	states/union territories	1970-71
(0)	(1)	(2)
1.	Andhra Pradesh	5.30
2.	Assam	2.76
3.	Bihar	7.50
4.	Gujarat	5.45
5.	Haryana	1.21
6.	Jammu and Kashmir	1.14
7.	Kerala	2.00
8.	Madhya Pradesh	7.17
9.	Maharashtra	11.00
10.	Mysore	7.18
11.	Nagaland	0.13
12.	Orissa	2.00
13.	Punjab	3.50
14.	Rajasthan	2.35
15.	Tamil Nadu	4.99
16.	Uttar Pradesh	19.00
17.	West Bengal	5.75
	total (states)	88.43
	union territories	
1.	Chandigarh	0.005
2.	Dadra and Nagar Haveli	0.018
3.	Delhi	0.247
4.	Goa, Daman and Diu	0.155
5.	Himachal Pradesh	0.475
6.	Manipur	0.060
7.	N.E.F.A.	0.099
8.	Pondicherry	0.125
9.	Tripura	0.120
	total (union territories)	1.244
	Central sector	2.42
	grand total	92.09

ANNEXURE 8.4

Outlays for Flood Control, Drainage, Anti-Waterlogging and Anti-sea-erosion schemes in 1970-71

(Rs. crores)

sl. no.	states/union territories	1970-71 Plan outlays
(0)	(1)	(2)
1.	Andhra Pradesh	[1]
2.	Assam	5.13
3.	Bihar	2.20
4.	Gujarat	0.42
5.	Haryana	1.60
6.	Jammu and Kashmir	1.15
7.	Kerala	0.70
8.	Madhya Pradesh	0.05
9.	Maharashtra	0.20
10.	Mysore	0.20
11.	Orissa	0.25
12.	Punjab	2.20
13.	Rajasthan	0.33
14.	Tamil Nadu	0.13
15.	Uttar Pradesh	2.00
16.	West Bengal	2.07
	total—states	**18.63**
	union territories	
1.	Dadra and Nagar Haveli	0.01
2.	Manipur	0.13
3.	Pondicherry	0.072
4.	Delhi	1.35
5.	Tripura	0.22
6.	Goa, Daman and Diu	[1]
7.	Himachal Pradesh	0.03
	total—union territories	**1.812**
	Central schemes	**2.17**
	grand total	**22.61**

[1]Shown under Irrigation.

ANNEXURE 8.5

Review of Important Projects included in the Annual Plan 1970-71

1. *Nagarjunasagar project (Andhra Pradesh)*

The project was sanctioned by the Ministry of Irrigation and Power for an estimated cost of Rs. 91.12 crores in 1960. The revised estimate of Rs. 163.54 crores has been approved by the Planning Commission in June 1969. This revised estimate does not include the revised cost of the canal system, the estimate in respect of which is still to be received from the State. The ultimate irrigation potential from the project is 831,600 hectares. An expenditure of Rs. 146.7 crores had been incurred on the project by 1968-69. During 1969-70 an outlay of Rs. 10.4 crores was approved for the project. Subsequently an additional outlay of Rs. 1 crores was made available, making the total outlay for the project in 1969-70 as Rs. 11.4 crores. The outlay agreed to for 1970-71 is Rs. 10.20 crores.

2. *Tungabhadra High Level Canal (Andhra Predesh and Mysore)*

It is a joint venture of Andhra Pradesh and Mysore taken up in two stages. Stage I of the project was approved for Rs. 13 crores in 1959. Revised estimate of Rs. 23.53 crores, contemplating ultimate irrigation potential of 88,660 hectares, was approved on October 1969. An expenditure of about Rs. 23 crores had been incurred on it to end of 1969-70 and the anticipated potential and utilisation to end of 1969-70 is 77,000 hectares and 52,000 hectares respectively. The project has been practically completed. Tungabhadra High Level Canal (Stage II) was approved for Rs. 14.56 crores in January 1967 with an utlimate potential of 95,950 hectares. The work was started in 1966-67 and about Rs. 3.4 crores has been spent to end of 1969-70. For 1970-71, an outlay of Rs. 2.25 crores has been provided comprising Rs. 1.50 crores in Andhra Pradesh and Rs. 0.75 crores in Mysore.

3. *Gandak project (Bihar and Uttar Pradesh)*

The revised estimate cost of the project approved in October 1969 is Rs. 159 crores of which the works in Bihar are estimated to cost Rs. 108.18 crores (including Rs. 12.64 crores for Nepal benefit works) and in Uttar Pradesh Rs. 50.39 crores (including Rs. 1.05 crores for Nepal benefit works). The ultimate irrigation potential of the project is 15.4 lakh hectares of which 11.9 lakh hectares are in Bihar, 2.9 lakh hectares in Uttar Pradesh and

0.6 lakh hectares in Nepal. A sum of Rs. 91.3 crores (excluding additional outlay of Rs. 5 crores in 1969-70) was anticipated to be incurred by the end of 1969-70 of which Rs. 56.4 crores pertain to Bihar, Rs. 24.9 crores to Uttar Pradesh and Rs. 10 crores to Nepal. For 1970-71, an outlay of Rs. 11.5 crores is provided in the Plan of Bihar, Rs. 3 crores in the Plan of Uttar Pradesh and Rs. 2.5 crores for Nepal benefit works. In Bihar, the potential anticipated to be created by the end of 1969-70 was 2.1 lakh hectares with a corresponding utilisation of 0.2 lakh hectares. The target at the end of 1970-71 is to create a potential of 3.1 lakh hectares with a corresponding utilisation of 1.1 lakh hectares. In Uttar Pradesh, the potential and utilisation created by the end of 1969-70 were anticipated to 0.5 lakh hectares and 0.2 lakh hectares respectively. The targets at the end of 1970-71 are to create a potential of 1.0 lakh hectares with a utilisation of 0.5 lakh hectares.

4. *Ukai project (Gujarat)*

The project envisages the construction of an earth-*cum*-masonry dam across the river Tapi in Surat District and a canal system on both banks to irrigate 1.58 lakh hectares and to generate 193 MW of power at 35 per cent load factor. In addition the scheme will assure supply of irrigation water to an area of 2.28 lakh hectares under the command of Kakrapar project. The project was approved by the Planning Commission in 1961 for an estimated cost of Rs. 58.21 crores. The revised cost as intimated by the State Govt. is Rs. 104.43 crores. The cost of Unit I i.e., dam and appurtenant works is stated to be Rs. 65.22 crores, that of Unit II Main Canal and Branches will be Rs. 17.81 crores and the balance amount of Rs. 21.41 crores will be for Unit III i.e., hydro-electric installations. A part of the cost of the dam will be ultimately debited to power sector. To the end of 1969-70 an expenditure of Rs. 55.20 crores under irrigation and Rs. 6.31 crores under power was incurred. For 1970-71 an outlay of Rs. 11.60 crores has been provided under irrigation and Rs. 3.50 crores for power portion.

5. *Pong Dam (Beas Unit II) (Haryana, Punjab and Rajasthan)*

The multipurpose project is a joint venture of Punjab, Haryana and Rajasthan. The revised project has been approved by the Planning Commission for an estimated cost of Rs. 162.90 crores (excluding the cost of transmission lines) in October 1969. The project envisages the construction of an earth-*cum*-gravel dam, 330 ft. high above river bed. The dam will have a gross storage of 6.6 MAF of which the live storages will be 5.6 MAF. A power

house with an installed capacity of 240 MW will be constructed at the end of power tunnels. The expenditure to end of 1969-70 was Rs. 83.83 crores. For 1970-71 a total outlay of Rs. 15 crores is provided.

6. *Tawa project (Madhya Pradesh)*

The project was approved in 1960 as a multipurpose project for an estimated cost of Rs. 27.10 crores. The irrigation cost was Rs. 20.24 crores with an ultimate irrigation potential of 303,640 hectares. The present revised project submitted by the State Government envisages only irrigation benefits. The expenditure incurred on the project to the end of 1969-70 was Rs. 10.71 crores. For 1970-71 an outlay of Rs. 3.5 crores has been provided.

7. *Jayakwadi project (Maharashtra)*

The project was approved for Rs. 38.46 crores in 1965. The ultimate irrigation potential of the project is 141,700 hectares. An expenditure of Rs. 8.16 crores had been incurred on the project to the end of 1968-69. The anticipated expenditure during 1969-70 is Rs. 4.44 crores. For 1970-71 an outlay of Rs. 4.5 crores has been provided for the project.

8. *Ghataprabha Stage II (Mysore)*

The project was approved for Rs. 13.18 crores in 1959. The revised estimated cost of the project as intimated by the State Government is Rs. 48.53 crores. An expenditure of about Rs. 14 crores had been incurred on the project by 1968-69. During 1969-70, an outlay of Rs. 3 crores was approved. Further an additional assistance of Rs. 1.3 crores was provided for the project during the year. In 1970-71 an outlay of Rs. 4.5 crores will be available for the project. The ultimate irrigation potential of the project is 101,000 hectares. The potential and utilisation anticipated to the end of 1970-71 are 73,000 hectares and 59,000 hectares respectively.

9. *Mahanadi Delta project (Orissa)*

The original cost of the project was Rs. 14.92 crores. In 1965 the cost was revised to Rs. 34.34 crores envisaging irrigation potential to an area of 651,000 hectares. The State Government had recently submitted the revised estimate of the project for Rs. 68.38 crores contemplating an ultimate irrigation potential of 708,500 hectares. This estimate is under scrutiny. An expenditure of Rs. 29.4 crores was incurred on the project by 1968-69. During 1969-70 the anticipated expenditure on the project was

Rs. 1.7 crores. The potential and utilisation to end of 1969-70 was 390,000 hectares and 315,000 hectares respectively. For 1970-71 an outlay of Rs. 2.25 crores has been provided for the project. The potential and utilisation by the end of 1970-71 is anticipated to be 405,000 and 324,000 hectares respectively.

10. *Rajasthan Canal project* (*Rajasthan*)

The revised estimated cost of the Stage I of the project is Rs. 110 crores, with an ultimate irrigation potential of 596,700 hectares. The expenditure by 1968-69 on the project was Rs. 57.13 crores. For 1969-70, an outlay of Rs. 4.8 crores was earmarked. In order to accelerate the work on the project, an additional outlay of Rs. 3.2 crores was made available to the project. Thus the expenditure until 1969-70 was about Rs. 65 crores. The potential and utilisation created by the end of 1969-70 were 208,000 hectares and 107,000 hectares respectively. For 1970-71 the targets are 249,000 hectares of potential and 135,000 hectares of utilisation. For 1970-71 an outlay of Rs. 7 crores has been provided.

11. *Ramganga project* (*Uttar Pradesh*)

The ultimate potential of the project is 6.5 lakh hectares. The installed generating capacity on completion of the project would be 180 MW. The expenditure incurred on the project by 1969-70 is anticipated to be Rs. 64 crores, of which Rs. 52 crores pertain to irrigation and Rs. 12 crores to power. For 1970-71, an outlay of Rs. 13 crores has been provided, of which Rs. 8 crores are for irrigation and Rs. 5 crores for power. No new benefits have started accruing from the project as yet.

12. *Kangsabati project* (*West Bengal*)

The expenditure incurred until 1968-69 was Rs. 25 crores. During 1969-70, an outlay of Rs. 2.5 crores was approved. Subsequently, a further outlay of Rs. 2 crores was provided for the project during that year. The anticipated potential and utilisation under the project by 1969-70 is 113,000 hectares and 100,000 hectares respectively. The outlay provided for the project for Annual Plan 1970-71 is Rs. 3.45 crores. The potential and utilisation anticipated to end of 1970-71 is 130,000 hectares and 119,000 hectares respectively.

CHAPTER 9

POWER

COMPLETION of generation schemes under implementation and extension of transmission and distribution facilities with a view to securing better utilisation of generating capacity and to support larger rural electrification programme have been aimed at in the formulation of the power plan.

9.2. A provision of Rs. 482.41 crores is made for the power programme during 1970-71 as against Rs. 367.12 crores provided in 1969-70, the break-up of which is as under:

Outlay for the Power Programme

(Rs. crores)

		1969-70	1970-71
1.	centre	44.92	83.63
2.	centrally sponsored	3.00	5.00
3.	states	303.65	375.83
4.	union territories	15.55	17.95
	total	**367.12**	**482.41**

9.3. The programme-wise distribution of Rs. 482.41 crores during 1970-71 is given below:

Distribution of Outlay by Categories of Power Programme

(Rs. crores)

s. no.	programme	centre	centrally spon-sored	states	union terri-tories	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)
1.	generation	59.55	..	216.44	7.80	283.79
2.	transmission and distribution	2.61	5.00	111.43	7.95	126.99
3.	rural Electrification	20.00	..	44.22	1.80	66.02
4.	investigation and miscellaneous	1.47	..	3.74	0.40	5.61
	total	**83.63**	**5.00**	**375.83**	**17.95**	**482.41**

Annexure 9.1 gives the statewise figures of outlays for 1969-70 and 1970-71.

9.4. About 1.32 million KW of additional generating capacity is expected to be commissioned during 1970-71 against 1.18 million KW commissioned during 1969-70. The scheme-wise statement showing benefits accrued during 1969-70 and those expected to accrue during 1970-71 are at Annexures 9.2 and 9.3 respectively. The cumulative generating capacity at the end of 1970-71 is estimated at 16.80 million KW. Some of the generating capacities that are expected to be commissioned in 1970-71 are: Ramgundem (62.5 MW) in Andhra Pradesh, Barauni (50 MW) in Bihar, gas turbines (54 MW) in Gujarat, Kuttiadi (75 MW) in Kerala, Nasik (280 MW) in Maharashtra, Sharavathi (89.1 MW) in Mysore, Parambikulam (95 MW), Ennore (165 MW) and Kodayar (100 MW) in Tamil Nadu, Obra Hydel (33 MW), Harduaganj Stage IV (55 MW) and Obra Thermal (50 MW) in Uttar Pradesh, and Indraprastha power station (55 MW) in Delhi. A list of principal generation schemes under implementation and new schemes proposed to be taken up in 1970-71 with their financial provisions is at Annexure 9.4.

9.5. The construction of transmission lines has also been given priority in the Plan. A provision of Rs. 127 crores is provided for this programme during 1970-71. An outlay of about Rs. 25 crores is earmarked for specific 220 KV and 132 KV lines and associated sub-stations which on completion will facilitate exchange of power with the neighbouring States and supply power to important loads. Some of the important 220 KV transmission lines which will be under construction in 1970-71 are mentioned at Annexure 9.5.

9.6. In the Plans of States and Union Territories, there is a provision of Rs. 46 crores for rural electrification. In addition, Rs. 20 crores are provided in the Central Plan for the Rural Electrification Corporation, a Government of India undertaking, which will in turn advance this amount to the States for financing selected rural electrification schemes. The break-up of Rs. 66 crores provided for rural electrification during 1970-71 is given at Annexure 9.6. This programme is expected to be supplemented with the additional funds that will be available from institutional financing agencies such as Agricultural Refinance Corporation and Agricultural Finance Corporation.

9.7. It is estimated that about 2.6 lakh additional pump sets will be energised during 1970-71 comprising 1.09 lakhs from the

Plan resources and 1.5 lakhs from other institutional finances. The distribution of 1.09 lakh pump sets in States and Union Territories is at Annexure 9.7.

9.8. Keeping in view the urgency for the expeditious implementation of inter-state lines, a provision of Rs. 5 crores has been made during 1970-71 for the purpose under the centrally sponsored scheme as against Rs. 3 crores provided in 1969-70. A list of lines included in 1970-71 Annual Plan is at Annexure 9.8. The inter-state lines between Belgaum and Kolhapur and between Munirabad and Hampi included in 1969-70 Plan are already in operation.

ANNEXURE 9.1

Outlay on Power during 1969-70 *and* 1970-71

(Rs. lakhs)

sl. no.	state/union territories	1969-70 Plan outlay	1970-71 Plan outlay
(0)	(1)	(2)	(3)
A.	*States*		
1.	Andhra Pradesh	2050	3457
2.	Assam	770	789
3.	Bihar	1100	2310
4.	Gujarat	1900	2200
5.	Haryana	1000	1473
6.	Jammu and Kashmir	700	842
7.	Kerala	1400	1530
8.	Madhya Pradesh	1200	1550
9.	Maharashtra	3650	4800
10.	Mysore	1350	1595
11.	Nagaland	45	59
12.	Orissa	815	1660
13.	Punjab	2429	2159
14.	Rajasthan	1700	1750
15.	Tamil Nadu	2600	2800
16.	Uttar Pradesh	6800	7525
17.	West Bengal	856	1084[1]
	Total—states	**30365**	**37583**
B.	*Union Territories*		
1.	Andaman and Nicobar Islands	10.0	12.00
2.	Chandigarh	15.0	40.00
3.	Dadra and Nagar Haveli	6.0	6.00
4.	Delhi	790.0	765.00
5.	Goa, Daman and Diu	136.42	95.98
6.	Himachal Pradesh	340.00	370.00
7.	Laccadive, Minicoy and Amindivi	4.50	5.86
8.	Manipur	60.00	80.53
9.	NEFA	30.00	29.50
10.	Pondicherry	18.00	17.60
11.	Tripura	145.00	372.13
	Total Union Territories	**1554.92**	**1794.60**

(0)	(1)	(2)	(3)
C. *Central Plan*			
1.	Ministry of I & P	1501.28[2]	1860.12
2.	Rural Electrification Corporation . . .	500.00	2000.00
3.	D.V.C.		1567.00
4.	Neyveli	192.00	93.00
5.	Atomic Power Stations	2299.00	2843.00
	Total (Central Plan)	4492.28	8363.12
D. *Centrally Sponsored Scheme*			
1.	inter-state Lines	300.00	500
	Grand Total $(A+B+C+D)$ . . .	6712.20	46240.72

[1]In addition Rs. 495 lakhs would be available from State Electricity Boards resources.

[2]Includes D.V.C. (Centre's share)

ANNEXURE 9.2

Physical Targets and Achievements in Generating Capacity during 1969-70

Scheme	targets		achievement	
	additional capacity targetted (in MW)	set No	capacity commissioned (in MW)	set No.
(1)	(2)	(3)	(4)	(5)
ASSAM				
Umiam (2×9)	18	1,2	Nil	..
Garo hills (2×2.5)	5	1,2	Nil	..
BIHAR				
Barauni (3×15+2×50)	50	4	50	4
Patratu (4×50+2×100)	50	4	50	4
Kosi (4×5)	15	1,2,3	5	1
JAMMU AND KASHMIR				
Kalakote (3×7.5)	15	2,3	..	..
KERALA				
Kuttiadi (3×25)	50	1,2	..	..
MADHYA PRADESH				
Ranapratap Sagar (4×43)	..	..	43	4
Satpura (5×62.5)	62.5	5	62.5	5
MAHARASHTRA				
Nasik (2×140)	140	1	..	..
MYSORE				
Sharavathi II (6×89.1)	178.2	5, 6	89.1	5
ORISSA				
Talcher (4×62.5)	62.5	4	62.5	4

(1)	(2)	(3)	(4)	(5)
TAMIL NADU				
Parambikulam (30+70+60+25)	70 (Sholayar)	..	..	..
	60 (Aliyar)	..	60	Aliyar
Basin Bridge (1×30)	30	..	30	..
Ennore (2×55+2×110)	55	1	55	1
UTTAR PRADESH				
Yamuna Stage I (3×17+3×11)	28	(set 3 of 17 & 11 MW)	28	Set No. 3 each
Obra (T) 5×50)	100	4, 5.	50	4
Obra (Hydel) 3×33)	33	1	..	..
WEST BENGAL				
Jaldhaka (3×9)	9	3	..	..
Little Ranjit (2×1)	2	1, 2	..	..
HIMACHAL				
Nogli (4×.5)	2	1, 2, 3, 4	1	1, 2
Bassi (3×15)	15	1	..	..
CENTRAL				
Neyveli (6×50+3×100)	200	8, 9	200	8, 9
Tarapure (2×190)	380	1, 2	380	1, 2
I. *Total Utilities*	**1630.2**		**1166.1**	
II. *Non-Utilities*				
Refinery at Madras (2×8 MW)	..		16	1, 2
Singareni (3×6)	..		6	2
Total All India	**1630.2**		**1188.1**	

ANNEXURE 9.3

Additional Generating Capacity Expected to be Commissioned during 1970-71

(in MW)

sl. no.	state/union territories	scheme and capacity planned	anticipated additional benefits during (1970-71)	set/s coming into operation in each power house
(0)	(1)	(2)	(3)	(4)
A. *State (Utilities)*				
1.	Andhra Pradesh	Ramagundem thermal station extn. (1×62.5)	62.5	1
2.	Assam	Umiam H.E. Scheme Stage II (2×9)	18	1, 2
		Garo Hills thermal scheme (2×2.5)	5	1, 2
3.	Bihar	Barauni Thermal Station (3×15+2×50)	50	5
		Kosi H. E. Scheme (4×5)	10	2, 3
4.	Gujarat	Gas turbine (2×27)	54	1, 2
5.	Jammu and Kashmir	Kalakote thermal Stn. (3×7.5)	15	2, 3
6.	Kerala	Kuttiadi H. E. Scheme (3×25)	75	1, 2. 3
7.	Maharashtra	Purlia thermal stn. (2×30)	30	1
		Nasik thermal stn. (2×140)	280	1, 2
8.	Mysore	Sharavathi H.E. Scheme Stage II (6×89.1)	89.1	6
9.	Punjab	U.B.D.C. H.E. Scheme (3×15)	30	1, 2
10.	Tamil Nadu	Parambikulam H.E. Scheme (30+2×35+60+25)	95	2, 3, 4, 5
		Ennore thermal stn. (2×55+2×110)	165	2, 3
		Kodayar H.E. project (1×60+1×40)	100	1, 2
11.	Uttar Pradesh	Obra H.E. Scheme (3×33)	33	1
		Harduaganj thermal stan. Stage IV (2×55)	55	1
		Obra thermal stn. (5×50)	50	5

(in MW)

(0)	(1)	(2)	(3)	(4)
12.	West Bengal	Jaldhaka H.E. Scheme (3×9) .	9	3
		Little Ranjit H.E. Scheme (2×1) .	2	1, 2
B.	*Union Territories (Utilities)*			
1.	Himachal Pradesh	Uhl (Basi) H.E. Scheme (3×15) .	30	1, 2
		Nogli H.E. Scheme (4×0.5) .	1	3, 4
2.	Delhi	Indraprastha (1×55) . . .	55	1
C.	*Self Generating Industries Establishments*			
	Singareni Collieries (3×6)		6	3
	Total—All India		**1319.6**	

ANNEXURE 9.4

List of principal Power Generation Schemes included in 1970-71 Annual Plan

(Rs. lakhs)

States	Schemes	Plan outlay 1970-71
1. Andhra Pradesh	Balimela dam	100
	Srisailam H.E. Scheme	350
	Lower Sileru H.E. Scheme	350
	Ramagundem thermal Station	50
	Kothagudem 'T' III Stage	1200
2. Assam	Umiam H.E. Scheme, Stage II	5
	Gauhati thermal station	86
	Namrup thermal station	2
	Gauhati gas turbine	106
	Garo Hills (Tura) thermal stn.	5
	Namrup thermal stn. extn.	150
3. Bihar	Barauni thermal station	80
	Pathratu thermal station	200
	Kosi hydel station	40
	Pathratu thermal station extension	550
	Subernarekha H.E. Scheme	150
	Thermal Scheme in Bihar*	575
4. Gujarat	Dhuvaran thermal station	1300
	Ukai H.E. Scheme	350
	Gas turbine	40
5. Haryana	Beas Unit I (multipurpose)@	480
	Beas Unit II (multipurpose)@	45
	Bhakra Right Bank (do)@	160
	55 MW thermal station	200
6. Jammu and Kashmir	Chenani H.E. Scheme	114
	Sumbal H.E. Scheme	218
	Lower Jhelum H.E. Scheme	293
7. Kerala	Kuttiadi H.E. Scheme	60
	Ididki H.E. Scheme	850

ANNEXURE 9.4—Contd.

(Rs. lakhs)

State	Schemes	Outlay 1970-71
8. Madhya Pradesh	Jawaharsagar H.E. Scheme@	158
	New Thermal Scheme*	10
9. Maharashtra	Koyna H.E. Scheme, Stage III	445
	Vaitarna H.E. Scheme	224
	Bhatgar and Vir H.E. Scheme	68
	Koradi thermal (I and II Units)	2231
	Purli thermal station	208
	Nasik thermal station	446
	New Hydro/Thermal Scheme*	254
10. Mysore	Sharavathy H.E. scheme, Stage II	150
	Sharavathy H.E. Scheme, Stage III	100
	New Scheme*	20
11. Nagaland	Dzuza Hydel scheme	10
12. Orissa	Balimela Dam and Power Station	840
13. Punjab	Beas Unit I (Multipurpose)@	719
	Beas Unit II (do)	68
	Bhakra Right Bank (do)	206
	U.B.D.C. H.E. Scheme	210
	Gurunanak thermal power station*	160
14. Rajasthan	Beas Unit I (Multipurpose)@	225
	Beas Unit II (do)@	240
	Bakhra Right Bank (do)@	13
	Jawaharsagar H.E. Scheme @	158
15. Tamil Nadu	Parambikulam Aliyar H.E. Scheme	38
	Kodayar H.E. Scheme	186
	Madras Plant Extn. (Basin Bridge)	60
	Ennore thermal power station	704
	Pandiyar Punna-Puzha	150
	Ennore T. Power Station extn.	2
	Kundah H.E. Scheme, IV	50
	New Generation scheme*	80

ANNEXURE 9.4—Concld.

(Rs. lakhs)

States	Schemes	Outlay 1970-71
16. Uttar Pradesh	Yamuna H.E. Scheme Stage II	1000
	Ramganga multipurpose project	500
	Obra H.E. Scheme	140
	Obra 'T' extn.	1600
	Harduaganj 'T' IV Stage	400
	Yamuna Hydel Stage IV, part I	150
	Maneri Bhali H.E. Scheme, Stage I	240
	Thermal Scheme[1]	250
17. West Bengal	Santaldih	510
	Little Ranjit	15
	Jaldhaka	45
Union Territories		
1. Delhi	Indraprashta Power Station Extn (55 MW set)	185
2. Himachal Pradesh	Giri Bata H.E. Scheme	202
	Uhl Extn. (Bassi) H.E. Scheme	58
3. Tripura	Gumti	279
4. Manipur	Leimakhong H.E. Scheme	24.85
C. *D.V.C. and Centre*		
D.V.C.	Chandrapura 'T' IV and V sets	1231
	Badarpur thermal (Delhi)	1200
	Loktak H.E. Scheme (Manipur)	150
	Baira-Siul H.E. Scheme (H.P.)	300
	Salal H.E. Scheme (J & K)	100
Centre	Rajasthan Atomic Power Station I Unit	740
	Rajasthan Atomic Power Station II Unit	1240
	Kalpakkam Atomic Power Station I Unit	626
	Kalpakkam Atomic Power Station II Unit	130
	Inter-State Projects	

[1]New Schemes

ANNEXURE 9.5

Important 220 *K.V. lines under construction during* 1970-71

State	Transmission lines
(0) (1)	(2)
1. Andhra Pradesh	Srisailam—Gudappah—Madras Border.
	Kothagudam—Gundala
2. Assam	Guhati—Nowgong
3. Bihar	Gaya—Dehri
4. Gujarat	Ukai—Jambura
5. Kerala	Idikki—Kalamassery
	Idikki—Pallom
6. Maharashtra	Nasik—Kopergaon
	Koyna—Karad
	Ambazari—Warora
	Panvel—Chinchwad
	Karad—Kohlapur
	Koyna—Kalwa—Borivilli
7. Mysore	Hubli—Belgaum
8. Orissa	Talcher—Theru balli
9. Punjab/Haryana	Hissar—Ballabgarh
	Ganguwal—Ludhiana
	Ganguwal—Panipat via Abdullapur
	Jullundar—Ludhiana
	Jullundar—Pong
10. Rajasthan	Ranapartap Sagar Atomic Station to Debari
	Hissar—Khetri—Jaipur
11. Tamil Nadu	Kalpakkam—Tiruvalam (230 KV)
	Ennore—Vellore (230 KV)
12. Uttar Pradesh	Chibro—Roorkee
	Chibro—Shamli—Muradnagar
	Kanpur—Lucknow
	Hardauganj—Muradabad
	Obra—Sultanpur (440 KV)
	Sultanpur—Gorakhpur
13. West Bengal	Santaldih—Howrah

ANNEXURE 9.6

Plan Outlay—1970-71 *for Rural Electrification*

(Rs. lakhs)

sl.no.	state/union territories	1970-71 Plan outlay
(0)	(2)	(3)
A. *States*		
1.	Andhra Pradesh	500
2.	Assam	199
3.	Bihar	200
4.	Gujarat	120
5.	Haryana	150
6.	Jammu & Kashmir	15
7.	Kerala	125
8.	Madhya Pradesh	550
9.	Maharashtra	..
10.	Mysore	104
11.	Nagaland	3
12.	Orissa	100
13.	Punjab	200
14.	Rajasthan	105
15.	Tamil Nadu	750
16.	Uttar Pradesh	1300
17.	West Bengal	1[1]
	Total States	**4422**
B.	*Union Territories*	180
C.	*Central Plan—R.E.C.*	2000
	Total *A+B+C*	**6602**

[1]The total expenditure on rural electrification schemes would aggregate to Rs. 60 lakhs—Rs. 159 lakhs avilable from State Electricity Boards resources.

ANNEXURE 9.7

Number of Irrigation pump sets energised in 1968-69, 1969-70 *and targets for* 1970-71

sl. no.	state/union territories	As on 31-3-69 (cumulative)	As on[1] 31-3-70 (cumulative)	Additional[2] targets 1970-71
(0)	(1)	(2)	(3)	(4)
1.	Andhra Pradesh	1,23,888	1,57,644	10,000
2.	Assam	54	55	20
3.	Bihar	50,005	57,873	5,000
4.	Gujarat	41,859	55,358	3,000
5.	Haryana	45,385	68,851	5,000
6.	Jammu and Kashmir	162	178	20
7.	Kerala	13,909	17,979	1,540
8.	Madhya Pradesh	31,469	36,109	18,000
9.	Maharashtra	1,24,992	1,61,117	[3]
10.	Mysore	91,826	1,09,735	7,600
11.	Nagaland	Nil	2	..
12.	Orissa	477	511	180
13.	Punjab	59,112	78,987	5,000
14.	Rajasthan	19,154	25,028	2,000
15.	Tamil Nadu	4,02,239	4,68,859	25,000
16.	Uttar Pradesh	75,465	99,985	25,000
17.	West Bengal	1,193	1,291	200
	Total States	**10,81,189**	**13,39,562**	**1,07,560**
II.	*Union Territories*			
	Delhi	2,975	3,988	800
	Pondicherry	4,178	4,520	520
	Others	562	772	50
	Total Union Territories	**7,615**	**9,280**	**1,370**
	Total All India (*I*+*II*)	**10,88,804**	**13,48,842**	**1,08,930**[4]

[1]Anticipated.

[2]Targets correspond to Plan outlay on rural electrification and do not include programme to be supplemented from institutional finances.

[3]Maharashtra has proposed to energise 53,000 pumps in 1970-71 from funds to be obtained from financial institutions and has not proposed outlay within the State Plan.

[4]About 2.6 lakhs pump-sets are expected to be energised, the balance 1.5 lakhs being financed from R.E.C. and other financial institutions.

ANNEXURE 9.8

Outlay on Centrally Sponsored Schemes—Inter-State Lines

(Rs. lakhs)

state	line	provision in 1970-71	
Andhra Pradesh	Munirabad—Hampi	11.55	41.55
	Ennore—Nellore	30.00	
Assam	Badarpur—Jirighat	10.00	35.00
	Alipurdaur—Bongaigaon	25.00	
Bihar	Chandil—Joda	80.00	130
	Purnea—Siliguri	5.00	
	Mughalsarai—Dehri	45.00	
Kerala	Pamba—Kayattar	20.00	20.00
Madhya Pradesh	Satpura—Ambazari	60.00	62.50
	Chandni—Bhusawal	2.50	
Maharashtra	Satpura—Ambazari	35.00	37.50
	Chandni—Bhusawal	2.50	
Orissa	Chandil—Joda	7.00	7.00
Tamil Nadu	Pamba—Kayattar	30.00	48.00
	Ennore—Nellore	18.00	
Uttar Pradesh	Giri—Yamuna	8.00	28.00
	Mughalsarai—Dehri	20.00	
West Bengal	Durgapur (DVC)	5.00	25.00
	Durgapur (WB)	5.00	
	Purnea—Siliguri	15.00	
	Alipurduar—Bongaigaon		
D.V.C.	Chandrapura—Durgapur (W.B.)	35.00	35.00
Himachal Pradesh	Giri—Yamuna	20.00	20.00
Manipur	Badarpur—Jirighat	10.00	10.00
	Total		**499.55**

CHAPTER 10

VILLAGE AND SMALL INDUSTRIES

THE programme for development of the village and small industries in 1970-71 has been formulated in the light of the Fourth Plan objectives and the progress made in the preceding year. About 1,78,000 small scale units had been registered with the State Industries Directorates on a voluntary basis up to December 1969, as compared to about 1,62,000 at the end of March 1969. The National Small Industries Corporation supplied machines valued at Rs. 4.56 crores to these industries in 1969-70. The number of industrial estates completed increased from 311 at the end of March 1968 to 346 at the end of March 1969. During this period, the number of sheds in these estates where small units were working increased from 4,753 to 5,113. There was a marked increase in the availability of institutional finance and also some improvement in the supply of scarce raw materials to small scale industries during 1969-70. Some more industries were reserved for exclusive development in the Small scale sector. It was also decided that the financial and credit institutions should provide certain concessions for financing new small and medium industries in selected backward districts in States and Union Territories. These developments are expected to accelerate further the pace of growth of these industries in the coming years. The output and the exports of the products of a number of other small industries also increased last year.

10.2. The production of the handloom, powerloom and khadi industries is estimated at 3,750 million meters in 1969-70. The exports of cotton handloom fabrics and manufactures were valued at Rs. 11.2 crores in 1969-70. The production of raw silk in 1969-70 was about 2.30 million kgs. The value of exports of silk fabrics and waste was nearly Rs. 18 crores. The exports of handicrafts and coir yarn and manufactures in 1969-70 amounted to about Rs. 95 crores and Rs. 13.7 crores respectively.

10.3. A total outlay of Rs. 43.44 crores has been provided in the public sector for the development of village and small industries during 1970-71 as against Rs. 38.48 crores in 1969-70,

the break-up of which in respect of Centre. States and Union Territories is as under :

TABLE 10.1: *Plan Outlay for* 1970-71 *and* 1969-70.

(Rs. lakhs)

	1969-70	1970-71
centre	2064	2251
centrally sponsored	122	124
states	1529	1787
union territories	133	182
Total	**3848**	**4344**

10.4. Industry-wise distribution of the Plan outlay for 1970-71 is given in the following table :

TABLE 10.2: *Industry-wise distribution of outlay on Village and Small Industries for* 1970-71

(Rs. lakhs)

industry	centre	centrally sponsored	states	union territories	total
handloom	7.15	..	422.38	14.37	515.89
powerlooms			69.27	2.72	
small scale industries	252.59	..	793.47	123.78	1169.84
industrial estates	..	..	198.95	24.75	220.20
sericulture	9.65	..	129.38	7.60	146.63
handicrafts	26.82	..	100.82	3.05	135.69
coir	0.62	..	49.25	0.69	50.56
khadi and village industries	1953.60	..	23.87	3.19	1980.66
rural industrial projects	..	114.09	..	..	114.09
collection of statistics	..	10.00	..	..	10.00
Total	**2250.43**	**124.09**	**1786.89**	**182.15**	**4343.56**

10.5. Of the total Plan outlay of Rs. 43.44 crores, an outla of Rs. 23.75 crores has been provided for the Central and Cen trally sponsored schemes for development of small industrie including Rs. 19.81 crores for Khadi and Village Industrie The programme for Khadi and village industries is implemente

directly by the Khadi and Village Industries Commission and the State Boards for these industries. The balance of the total outlay of Rs. 19.69 crores has been provided for the schemes to be implemented by State Governments and Administrations of Union Territories mainly for credit facilities, technical improvements, training and common service facilities, quality marking and industrial estates.

10.6. The levels of production and export of selected items expected during 1970-71 are given below, along with a comparative position for 1969-70.

TABLE 10.3: *Achievements and targets*

	1969-70		1970-71
	target	estimated achievement	target
production			
handloom, powerloom and khadi cloth (m. metres).	3500	3750	3900
raw silk (m. kg.)	2.40	2.30	2.50
exports			
cotton handloom fabrics and manufactures (Rs. crores)	8.50	11.20	15.00
handicrafts (Rs. crores) . . .	80.00	95.00	100.00
coir yarn and manufactures (Rs. crores)	14.70	13.66	14.50
silk fabrics and wastes (Rs. crores) .	7.50	17.93	20.00

CHAPTER 11

INDUSTRY AND MINERALS

In view of the gestation period of industrial and mineral projects final decisions on their location, scope, foreign collaboration and provision of credit have to be taken during the crucial year of 1970-71 if the targets envisaged for 1973-74 are to be achieved. This is particularly so of steel and fertilisers for which lump sum provisions have been made in the Fourth Plan for creation of additional capacity. In the case of steel, it has been decided to set up three new steel plants at Salem (Tamil Nadu), Vishakhapatnam (Andhra Pradesh), and Hospet (Mysore). Studies on exact location of these plants have been initiated. In the field of fertilisers, a decision has been taken to set up three coal based fertiliser plants at Talcher (Orissa), Ramagundem (Andhra Pradesh) and Korba (Madhya Pradesh). The expansion of the Trombay Fertiliser Project has been approved. Approval has also been given to two fertiliser projects in the private sector, namely, at Goa and Mithapur. A corporation for paper and pulp projects has been set up in the public sector and work on one or two paper and pulp plants would be initiated during the year. Approval has been given for setting up a gas cylinder project at Naini and the manufacture of printing machinery at one of the units of HMT. A decision has also been taken on the petro-chemical complex at Koyali (Gujarat).

11.2. Under the new industrial licensing policy, greater freedom has been given to private enterprise and initiative, particularly to the new entrants. New undertakings as well as expansion of the existing units requiring and investment of Rs. one crore or less have been exempted from the licensing requirements under the Industries (Development and Regulation) Act, except in certain cases. Even in the case of industries requiring investment ranging from Rs. one crore to Rs. 5 crores, licences would be issued liberally except where foreign exchange implications necessitate careful scrutiny or where the applicants are parties belonging to larger industrial houses. In order to ensure timely implementation of programmes in the field of basic, strategic and critical industries which have been included in the 'core' sector and to ensure the achievement of their targets, special efforts will be made. The essential in-puts required for these industries would be provided on a priority basis. The industries in this sector as well as in the heavy investment sector involving an investment of more than Rs. 5 crores would be open to the

larger industrial houses. The detailed planning of industries listed in the 'core' sector is being taken up and their requirements of credit and foreign exchange are being worked out unit-wise. In order to provide necessary information to small and new entrepreneurs to help them to take investment decisions, a list of 123 industries where there is scope for investment and a list of 121 industries where there is scope for foreign collaboration have been published.

11.3. Industrial production which had suffered a severe setback in 1966-67 because of the recessionary conditions had shown a significant recovery in 1968-69 with the index of industrial production rising to 163.2 (1960=100) from 153.6 in the previous year. The progress was continued during 1969-70 in which the rate of increase was around 7 per cent. The demand constraint which was an impeding factor in industrial expansion during the previous years no longer exists. In fact, in a number of industries, production is not able to keep pace with the demand and shortages have started appearing. The shortage of steel, in spite of a higher level of output during the last year, indicates that the demand for steel has increased significantly. The longer delivery schedules being quoted by the machinery manufacturers show that there is revival of demand for machinery which will lead to better utilisation of capacity. Measures have already been initiated to cope with the increased demand for steel. Hindustan Steel has already taken up a programme of making renovations and providing certain finishing and other facilities so as to step up its output particularly for the categories for which there is shortage. Under normal conditions it is expected that there would be an increase of about a million tonnes in steel output during the year.

11.4. The upward trend in demand for basic industrial goods such as steel, aluminium, industrial machinery and machine tools will lead to greater utilisation of capacity in industries producing them. The construction of the Bokaro Steel Plant and decision to set up additional capacity in steel, will help in fuller utilisation of the capacity existing in the country for metallurgical equipment, structurals and allied equipment in public as well as the private sector. The expansion programme for power envisaged in the Fourth Plan has also led to increase in demand for heavy electrical equipment. In order that the capacity constraints do not come in the way of achieving rapid industrial growth and meeting consumer demand, new investment decisions will have to be taken during the year. As such, the

Annual Plan for 1970-71 envisages creation of additional capacity in a number of industries such as fertilisers, industrial machinery, bicycles, dry batteries, storage batteries, radio receivers, cement and automobile tyres. The investment outlook during the year is full of optimism. There is a buoyant trend in the capital market and a few capital issues which have been floated in the market recently have been heavily over-subscribed showing the confidence of the investors.

11.5. The import and export policy for the year 1970-71 has been formulated with a view to helping industrial growth and expansion. The State Trading Corporation and the Minerals and Metals Trading Corporation will organise bulk imports of certain raw materials for the actual users and registered exporters. It is proposed to set up an Industrial Raw Materials Assistance Centre which would enable the industrial manufacturers to obtain supplies off-the-shelf at their option as and when they require, against their import licences. This would help the actual users particularly in the medium and small scale sector. With the introduction of this system, it is expected that the supply of raw materials would no longer be an impediment in expanding industrial production. Similarly, a number of concessions have been given to exporting units in the matter of import of raw materials. Industrial units in the priority sector exporting 10 per cent or more of their production will be granted preferred source of supplies and facilities for further expansion of their export production. A higher preference in the matter of source of supply will be accorded to the units exporting 25 per cent or more of their production.

11.6. The procedures regarding imports applicable to manufacturer-exporters have been further simplified. A system of "on account" issue of import licences is being introduced from this year for the benefit of established registered manufacturer-exporters having a minimum export performance of the value of more than Rs. 10 lakhs (f.o.b.) during 1969-70, in respect of non-traditional goods. This will enable them to obtain half of the value of import replenishment licences obtained under the import policy for registered exporters during the previous year. The import requirements of 59 priority industries in respect of raw materials and components will continue to be met on the basis of their actual needs for maintenance or expansion of production. As a result of these new measures and in the light of the increase in domestic and export demand, it should be possible to achieve an increase of about 8 per cent in industrial production during 1970-71.

11.7. A provision of Rs. 5 crores has been made in the Fourth Plan for giving subsidy to units set up in selected backward areas. The financial and credit institutions would also provide certain general concessions for financing industries in backward areas in the States and Union Territories. To begin with, the provision regarding subsidy would be applicable to two districts in each of the nine relatively backward States and one district in every other State and Union Territory. Some of the States have already identified backward districts where the schemes would be applicable while others are doing so.

Plan Outlay

11.8. The total outlay envisaged in 1970-71 for industrial and mineral schemes in the public sector is Rs. 622.33 crores, which shows a considerable step-up over the outlay of Rs. 579.61 crores in 1969-70. As in the past, the major part of the investment would be in the Central Sector. The break-up of the outlay between the Centre, States and Union Territories for 1969-70 and 1970-71 is given below.

TABLE 11.1: *Plan Outlay—Industry and Minerals*

(Rs. crores

	1969-70	1970-71
1. centre	548.27	586.68
2. states	30.64	34.90
3. union territories	0.70	0.75
Total	**579.61**	**622.33**

11.9. The outlay for industrial and mineral development at the Centre is about Rs. 38 crores more than in the previous year, in the case of States the increase in outlay is over Rs. 4 crores. The Plan provides for an outlay of Rs. 65 crores for financing programmes of industrial financial institutions, namely, I.D.B.I., I.C.I.C.I., and I.F.C. without making any budgetary draft on resources. This amount will be obtained through borrowings from the market and from the National Industrial Credit Fund (L.T.O.) of the Reserve Bank of India and also includes the contribution of the Reserve Bank of India to the share capital of the Industrial Development Bank.

11.10. A statement showing the scheme-wise allocation of the proposed central outlay is given at List VI in the Appendix. The following is the break-up of the outlay among major sectors.

TABLE 11.2: *Outlay by Major Industrial Sectors*

(Rs. crores)

Industry	outlay	Percentage to the total
steel	209.89	36
fertilisers	83.86	14
petroleum	64.02	11
mineral development	37.40	6
non-ferrousmetals	36.94	6
chemicals	16.28	3
atomc energy	15.88	3
others	122.41	21
Total	586.68	100

Above that about 80% of the outlay provided in the Central sector is for steel, fertilisers, petroleum, chemicals, non-ferrous metals, mineral development and atomic energy. Among other schemes for which provision has been made are heavy electrical equipment, machine tools, National Textile Corporation, plantations, ship building, Cement Corporation, expansion of NEPA and industrial financing institutions.

11.11. The outlay of Rs. 35.65 crores has been provided for industrial and mineral development programmes of States and Union Territories. The important projects for which provision has been made in the State Plans are the continuous casting steel plant in Tamil Nadu, pig iron and ferro-chrome projects in Orissa, new Government electric factory in Mysore, a sugar factory in Nagaland, Dalla Cement Factory in U.P., spun silk mill and heavy electrical equipment factory in Bihar, Durgapur Chemicals in West Bengal and Titanium project in Kerala.

11.12. The targets of capacity and production for 1970-71 for the 'core' industries and anticipated levels of capacity and production for 'other selected industries' along with the achievements recorded during the previous two years are given at Annexures 11.1 and 11.2 respectively.

Iron and Steel

11.13. A provision of Rs. 209.89 crores has been made for steel projects in the Annual Plan for 1970-71. This is slightly higher than the outlay provided in the previous year. Out of the above provision, Rs. 179.50 crores is for Bokaro Steel Plant including Rs. 2 crores for Tenughat dam for provision of water-supply for the project.

11.14. There has been a revision in the schedule of construction as well as costs of the Bokaro Project. According to the revised schedule, the first blast furnace will be commissioned in December 1971. The progress has been slower than envisaged because of strikes in the structural fabrication units, labour trouble in the civil contractors organisation and delay in the supplies of plant and equipment and refractories. It is expected that during 1970-71 the bulk of the supplies including those from U.S.S.R. would be received. According to the revised estimates the total cost of the project is now reckoned at Rs. 761 crores.

11.15. The outlay of Rs. 30.39 crores provided for Hindustan Steel Limited, which will be financed entirely from its internal resources, is partly for making outstanding payments and finishing of the works in progress in connection with the completion of expansions in the three steel plants and partly for providing balancing equipment and carrying out renovations in the existing steel plants. Provision has been made for completion of the sixth blast furnace of the Bhilai Steel Project. The furnace is likely to be commissioned towards the end of 1970-71.

11.16. In the Rourkela Steel Plant certain works in progres such as the commissioning of Benzol and Hydrogen Sulphide Recovery Units, conversion of dolomite shaft kiln to lime kiln, commissioning of galvanising line No 1, slab treatment facilities and modifications of stack 1 in the steel melting shop are expected to be completed.

11.17. In the Alloy Steel Plant, Durgapur, most of the units are in operation. The provision made in the Plan is for making balance payments to contractors for supply of plant and equipment including that for vacuum degassing unit.

Non-Ferrous Metals

11.18. A provision of Rs. 36.94 crores has been made for non-ferrous metals for 1970-71. This includes development of mines and expansion of capacity for aluminium, copper and zinc.

11.19. The total production of aluminium during 1969-70 was over 130,000 tonnes. A new smelter in the private sector having a total capacity of 30,000 tonnes was commissioned during 1969-70 at Belgaum. The capacity of the aluminium plant at Renukot increased from 60,000 tonnes to 80,000 tonnes. As a result of installation of these capacities the production of aluminium is likely to be of the order of 170,000 tonnes in 1970-71.

11.20. Bharat Aluminium Co. in the public sector is setting up two aluminium plants at Korba and Koyna with a capacity of 100,000 tonnes and 50,000 tonnes respectively. In the Annual Plan for 1970-71 a provision of Rs. 12.40 crores has been made for these projects. The bulk of this provision would be utilised for the first phase of Korba Project *viz.* the aluminium plant which is under construction. The detailed project report for the smelter is being prepared by the National Industrial Development Corporation and would be ready shortly. The first pot-line is likely to be commissioned in 1973. The detailed project report for the Koyna project has been taken up and is likely to be ready by August 1971. It is proposed to advance the setting up of the smelter at Koyna and initially feed the plant with alumina from Korba. The detailed project report for the smelter is expected by January 1971.

11.21. The total production of zinc during 1969-70 was 23,700 tonnes contributed by the public sector smelter at Udaipur and the private sector smelter at Alwaye. Both the plants are running almost at half their rated capacities. Efforts are being made to increase their production. The Annual Plan makes a provision of Rs. 3.9 crores for Hindustan Zinc.

11.22. The total production of copper in 1969 was 9737 tonnes. This was produced by Indian Copper Corporation Ltd. which is the only unit producing copper at present. The expansion of their production capacity to 16,560 tonnes per annum is under way and is expected to be completed by 1971-72. The work for creating additional capacity of copper at Khetri (Rajasthan) by Hindustan Copper Ltd., a company in the public sector, is in progress and the erection of the concentrator has been taken in hand. The project is likely to be commissioned towards the end of the Fourth Plan period. It has also been decided to develop the Rakha Mines in Bihar in the public sector and an exploratory mining scheme has been initiated. Government have sanctioned an exploratory mining scheme for development of the Nallakonda copper deposits and the Bandalamottu lead deposits, both in Andhra Pradesh, at an estimated cost of Rs. 35 lakhs each, covering a period of two years. Based on the results of the exploratory mining, schemes for fuller development of the deposits will be worked out. The Hindustan Copper Ltd. have taken up the work on the scheme. The company is also examining the feasibility of exploiting smaller copper deposits like Daribo, Chandmari and Akwali, all in Rajasthan. In the Annual Plan for 1970-71 a provision of Rs. 20.56 crores has been made for Hindustan Copper Ltd. This includes a provision of

Rs. 150 lakhs for the development of Rakha mines and out of the balance, the bulk is for the Khetri and Kolihan Copper complex.

Engineering Industries

11.23. The provision for engineering industries is mainly for completion of the existing projects and their diversification. The Pumps and Compressors Project at present under implementation has made considerable headway and a provision of Rs. 1.25 crores has been made for it. It has been decided to set up the gas cylinders project at Naini (Uttar Pradesh) and a provision of Rs. 65 lakhs has been made for it. The Bharat Heavy Plate and Vessels Project at Vishakhapatnam for manufacturing equipment required by the fertiliser, petroleum and petro-chemical industries is likely to be commissioned during the year. The company has already started fabrication of some items of equipment required by Bokaro Steel Ltd. and has received orders of the value of about Rs. 2 crores. The engineering industries, after a period of recession, are showing improvement on account of larger exports as well as increase in indigenous demand. It is anticipated that the existing capacities in these industries would be utilised more fully. Additional capacities are likely to materialise in paper and pulp machinery, heavy equipment for fertilisers, chemical machinery and consumer industries like electric fans, bicycles and radio receivers.

11.24. The Heavy Engineering Corporation Ltd. has received orders for supplying about 100,000 tonnes of mechanical equipment, steel structurals and machine tools to the Bokaro Steel Plant and deliveries have been started. This will enable the capacity available in the three plants of HEC being reasonably utilised. With substantial increase in the demand for heavy electrical equipment, the Heavy Electricals (India) Ltd. are fully loaded and have orders on hand to cover the production of hydrogenerating units for the entire Fourth Plan period and for transformers, traction equipment and thermal generating plants for the next two years. With increase in demand for commercial vehicles, agricultural machinery and transport equipment, their output is expected to be stepped up considerably.

Fertilisers

11.25. A provision of Rs. 83.86 crores has been made for the implementation of fertiliser programme in the public sector. There are at present 5 fertiliser projects under construction in the

blic sector. Out of these five, Madras project would be com-ssioned during this year. There has been some delay in the mpletion of the other projects. The projects at Durgapur and chin which were to go into production during the first quarter 1970-71 are now likely to be commissioned in 1971. The ojects at Barauni and Namrup II are expected to go into pro-ction in 1972. With the commissioning of the FACT IVth ge project, which will have an installed capacity of 22,000 nes of nitrogenous fertilisers, the capacity for nitrogenous tilisers would go up to 1366,000 tonnes (N) in 1970-71 from 44,000 tonnes (N) in 1969-70.

11.26. A decision has been taken to set up three coal based tiliser projects in the public sector at Talcher, Ramagundem d Korba. Preliminary work will be started during this year. he expansion of the Trombay fertiliser project has also been ap-oved. The work on the Kandla fertiliser project which is in e cooperative sector is in progress.

11.27. The Kanpur project and the expansion of the Gujarat ate fertiliser project in the private sector were completed in 69-70. Two more projects have been approved in the pri-te sector. These would be set up at Mithapur and Goa.

11.28. The production of fertilisers during 1969-70 was 715,600 nnes (N) and 221,500 tonnes (P_2O_5). It is expected that ring 1970-71, it would rise to 940,000 tonnes (N) and 300,000 nnes (P_2O_5).

tro-Chemicals and other organic chemicals

11.29. A provision of Rs. 10.89 crores has been made for plementation of the Aromatic project and the naphtha cracker oject at Koyali. The work on implementation of the aro-atic project is in progress. The technical collaboration agree-ents for the naphtha project have been signed. The licensing down stream projects consuming products from the above two its is under way.

11.30. With a record production of sugar, the availability molasses for alcohol industry has increased considerably. The cohol based industries are now able to get adequate quantities raw materials for their use. For 1970-71 a higher level of oduction is therefore envisaged for polyethylene, synthetic rub-r and acetic acid.

Mineral Oil

11.31. The Annual Plan for 1970-71 contains a provision of Rs. 64.02 crores for mineral oil programmes. The bulk of the expenditure is meant for exploration, development and production projects of the Oil and Natural Gas Commission and the refining and marketing activities of the Indian Oil Corporation.

11.32. During 1969-70 ONGC continued exploration and production of crude oil. The production of crude oil in the country in 1969-70 was 6.2 million tonnes out of which ONGC produced 3.44 million tonnes from Gujarat and 0.19 million tonnes from Assam oil fields. The production by Oil India Ltd. was 2.51 million tonnes. During 1970-71 ONGC has a programme of drilling of about 2.68 lakh metres and production of 4.3 million tonnes of crude oil and 365.85 million cubic metres of saleable gas. Out of the Plan outlay of Rs. 41.54 crores, the budget provision for ONGC for 1970-71 is Rs. 11.59 crores and the balance of Rs. 29.95 crores would be provided from its internal resources.

11.33. With the commissioning of the Madras refinery in June 1969, the refining capacity in terms of crude throughput reached 19.5 million tonnes at the end of 1969-70. The anticipated demand for petroleum products in 1970-71 is about 18 million tonnes and production would also be of the same order. However, there is likely to be a shortfall in indigenous availability in respect of a few products. A phased expansion of the refining capacities and arrangements for matching the demand with the crude oil from indigenous sources and from imports is under examination.

11.34. The sale target of the Indian Oil Corporation for 1970-71 is 13.207 kilolitres of products. The outlay of Rs. 21 crores for the Indian Oil Corporation includes provision for both refinery and marketing divisions.

Coal

11.35. As against the production of 73 million tonnes of coal envisaged in 1969-70, the production actually achieved was of the order of 74.7 million tonnes. The coking coal production was 17.6 million tonnes which was a little over the level of 17 million tonnes achieved in 1968-69. If the present upward trend in production continues, the production of coal in 1970-71 may reach the figure of about 78 million tonnes. Out of this, the requirements of coking and blendable coal for the steel plan

coke ovens and the Sindri fertiliser plant are expected to be about 18.5 million tonnes. The public sector washeries at Dugda-II, Sawang and Kathara were commissioned towards the close of 1969-70. During 1970-71 the expansion of the capacity of National Coal Development Corporation's washery at Kargali will be complete. NCDC's blendable coal washery at Gidi is ready for commissioning but as there is no demand for the washed blendable coal, the plant may have to be kept on a 'care and maintenance basis' for some time. The full capacity of the new coking coal washeries may not be utilised owing to lack of demand. An outlay of Rs. 12.77 crores has been provided for the National Coal Development Corporation in the Annual Plan.

Lignite

11.36. The Neyveli Lignite Corporation accounted for the total production of 4.2 million tonnes of lignite in the public sector in 1969-70. This was utilised for power generation, manufacture of fertiliser (urea) and carbonised briquettes. The power generation capacity which reached 500 mw in 1969-70 is expected to go up to 600 mw by the end of 1970-71. The production of lignite is expected to go up to 5 million tonnes by 1970-71. An outlay of Rs. 3.46 crores has been provided for mine development schemes.

Iron Ore

11.37. The total production of iron ore during 1969-70 was of the order of 28.93 million tonnes. The total export reached a record figure of about 15.12 million tonnes during 1969, out of which about 12.62 million tonnes *i.e.*, 84% were exported to Japan. Construction work in respect of the public sector project at Bailadilla-5 and Donimalai is in progress. The allocations for iron ore development during 1970-71 are Rs. 300 lakhs for Kiruburu expansion, Rs. 600 lakhs for Bailadilla-5, Rs. 280 lakhs for Bailadilla-14 and Rs. 300 lakhs for Donimalai projects. The feasibility study for Kudremukh iron ore project will be completed during 1970-71, while the feasibility report on the agglomeration of Donimalai fines has been completed.

Mineral Exploration

11.38. Mineral exploration will be continued by the Geological Survey of India with an increase both in intensity as well as extent. In order to expedite the pace of detailed exploration, GSI is re-orienting its structure and expects to put into the field

an air-borne geophysical survey unit during 1970-71. It is expected that further air-borne geo-physical survey will be conducted by GSI with French collaboration. A new wing of marine geology is expected to be set up in GSI. The Indian Bureau of Mines, besides continuing its activities of conservation, development and beneficiation would provide consultancy services to the private mine owners so as to promote overall mineral development. The detailed physical programmes of work have been drawn up by GSI and IBM showing targets *vis-a-vis* personnel and equipment. A provision of Rs. 300 lakhs for GSI, Rs. 10 lakhs for IBM and Rs. 88 lakhs for AMSE has been made in the Annual Plan.

Cement

11.39. The installed capacity of cement is likely to increase by about a million tonnes as a result of completion of certain units both in the public and private sectors. The cement project at Mandhar having a capacity of 200,000 tonnes per annum which is being implemented by the Cement Corporation of India, has started production. The Cement Corporation of India is implementing two other projects at Kurkunta (Mysore) and at Bokajan (Assam), each with an installed capacity of 200,000 tonnes. Erection of machinery and civil engineering works are in progress at Kurkunta and the plant is likely to go into production by the middle of 1971. Preliminary work on the project at Bokajan has started.

Paper and Newsprint

11.40. The installed capacity of the Nepa Mills which at present is the only mill producing newsprint has been raised from 30,000 tonnes to 75,000 tonnes per annum by the installation of another machine. The production during 1969-70 was approximately 39,000 tonnes and full production is expected to be achieved during the next two years.

11.41. In view of the need for increasing the production of newsprint, it is proposed to set up in the public sector another newsprint plant based on eucalyptus with a capacity of 75,000 tonnes per annum in Kerala. A proposal to set up a newsprint mill in the private sector in Himachal Pradesh is under consideration.

11.42. The capacity for paper and paperboard has gone up to 768,000 tonnes during 1969-70 from 730,000 tonnes in the

previous year. As a result of implementation of some modernisation and expansion programmes, it is expected that the total installed capacity of the industry would increase to about 813,000 tonnes during 1970-71. The supply of various grades of paper and paperboards, which till recently was just adequate to meet the demand, is becoming increasingly difficult. A number of steps are under consideration in order to increase the supply of paper. The Hindustan Paper Corporation which has recently been set up in the public sector proposes to take up paper or pulp units in the public sector during the Fourth Plan to meet a part of the growing demand.

Sugar

11.43. Production of sugar during the 1969-70 cane crushing season is likely to reach the record figure of 4.3 million tonnes. The high level of sugar production has created problems of disposal and storage. This may have some repercussion on the future production of sugar. During 1970-71 the production of sugar is estimated to be of the order of 4.2 million tonnes which is slightly lower than the record level of the previous year.

Automobile Tyres and Tubes

11.44. For manufacture of automobile tyres and tubes the capacity installed or licensed or approved up to the end of 1969-70 was of the order of 5.5 million. The installed capacity is of 3.34 million and the output was expected to be about 4 million tyres and tubes. The targets of capacity and production of automobile tyres during the Fourth Plan were reviewed and it was considered necessary to increase the target capacity to 8 million by 1973-74 so that it could yield a production of about 7 million tyres. Accordingly, it has been decided to license further capacity for the manufacture of this item. An additional capacity of 2.5 million tyres is proposed to be licensed during the current year for which applications have already been invited by the Directorate General of Technical Development and are under consideration. It is also expected that a major part of the capacity of 1.5 million tyres sanctioned during the last two years will go into production during the current year.

Watches

11.45. The Hindustan Machine Tools has prepared a detailed project report for the setting up of a new watch factory at Zianakot near Srinagar and for expansion of the existing factory in Bangalore. The present H.M.T. watch factory is manufacturing

about 350,000 watches per annum. The proposed factory in Srinagar will manufacture 300,000 watches of the existing type while the Bangalore factory will add 200,000 watches with date and automatic movements to its present production. During 1970-71 the site for the Srinagar factrory will be developed and orders for the machinery required by the two factories are expected to be placed with the foreign suppliers. The initial production of both these factories is expected to start in 1972-73.

Electronics

11.46. During the year 1970-71 production of electronic components and test instruments is expected to make substantial progress. Additional capacities are likely to be established in a number of items. The statement below indicates in quantitative terms the production capacity to be achieved during 1970-71:

TABLE 11.3: *Production capacity in Electronics*

S. no.	important electronic components	production capacity to achieved during 1970-71
		(million number
(0)	(1)	(2)
1.	valves	5
2.	transistors and diodes	45
3.	carbon resistors	150
4.	paper and mica capacitors	23
5.	electolyric capacitors	40
6.	styroflex capacitors	27
7.	polyster capacitors	25
8.	seramic capacitors	5
9.	trimmers	1
10.	loudspeakers	
11.	cang condensers	
12.	potentiometers	
13.	band switches	
14.	ferrites	
15.	I.E.T.	1

(Million numbers)

(0)	(1)	(2)
16.	telescopic aerials	2.0
17.	valve holders	5.0
18.	ficture tubes	5,000 Nos.
19.	connectors	50,000 Nos.
20.	relays	50,000 Nos.

The approximate value of production of electronic components and test instruments would be about Rs. 40 crores in 1970-71. The additional investment during this period for the manufacture of components and other items would be of the order of Rs. 2-3 crores.

Atomic Energy

11.47. The Annual Plan for 1970-71 contains a provision of Rs. 15.88 crores for industrial and mineral programmes of the Department of Atomic Energy. The bulk of the provision is for continuing schemes namely, the Nuclear Fuel Complex, Heavy Water plant at Kota, and the Power Reactor fuel processing plant, Tarapore etc. The major part of the expenditure on the continuing schemes of the Nuclear Fuel Complex is expected to be incurred during the year. The work on the Heavy Water plant at Kota and on the Power Reactor Fuel re-processing plant at Tarapore is expected to gather momentum. Provision has also been made for additional investment in the equity capital of the Indian Rare Earths Ltd. A token provision of Rs. one lakh has been made for carrying out feasibility studies for certain new plants of the Nuclear Fuel Complex such as the production of seamless steel tubes, nitric acid plant, Zirconium powder plant, Titanium pilot plant. The work on the Heavy Water plant, Baroda will be speeded up.

ANNEXURE 11.1

Capacity and production estimates for 1968-69 and 1969-70 and targets for 1970-71 for 'core' industries

sl. no.	name of the industry	unit	1968-69 (actuals)		1969-70 (target/ anticipated)		1969-70 (revised estimates)		1970-71 (target)	
			capa-city	pro-duction	capa-city	pro-duc-tion	capa-city	pro-duc-tion	capa-city	pro-duc-tion
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	*Iron and Steel*									
	(i) steel ingots	mill. tonnes	9.0	6.4	9.0	7.5	9.0	6.4	9.0	7.6
	(ii) finished steel	mill. tonnes	6.9	4.7	7.0	5.5	7.0	4.8	7.0	5.7
	(iii) pig iron for sale	mill. tonnes	1.3	1.3	1.3	1.3	1.3	1.27	1.3	1.1
	(iv) alloy & special steel	'000 tonnes	135.0	43.0	225.0	85.0	222.0	140.4	222.0	170.0
2.	*Non-Ferrous Metals*									
	(i) aluminium	'000 tonnes	117.0	125.3	167.0	145.0	163.8	135.0	168.8	170.0
	(ii) copper	'000 tonnes	9.6	9.4	9.6	9.6	9.6	9.8	9.6	9.6
	(iii) zinc	'000 tonnes	38.0	26.3	38.0	32.0	38.0	23.7	38.0	28.0
3.	*Industrial Machinery*									
	(i) chemical machinery	Rs. mill.	124.0	113.0	150.0	110.0	133.5	133.0	260.0	150.0
		Rs. mill.	4.8	1.0	..	..	4.8	2.4	4.8	3.7

(iii) rubber machinery	Rs. mill.	2.8	1.7	..	..	2.8	2.2	2.8	2.7
(iv) paper & pulp machinery	Rs. mill.	64.0	27.0	64.5	25.0	44.5	33.0	76.0	46.0
(v) metallurgical & other heavy equipment	'000 tonnes	85.00	25.0	85.0	30.0	85.0	18.0	85.0	22.0
(vi) machine tools (organised sector only)	Rs. mill.	610.0	247.0	610.0	325.0	610.0	272.0	650.0	350.0
4. *Heavy Electrical Equipment*									
(i) turbines-hydro	mill. kw.	0.5	0.1	0.7	0.25	0.80	0.38	1.0	0.50
(ii) turbines thermal	mill. kw.	1.5	0.4	1.4	0.8	1.5	0.50	1.5	0.70
(iii) power boilers	mill. kw.	1.5	0.4	1.3	0.8	1.5	0.6	2.0	0.85
5. ship-building and dredgers	No. of ships	3	2	3	3	3	3	3	3
6. *Fertilisers*									
(i) nitrogenous (in terms of N)	'000 tonnes	1024.0	541.0	1344.0	900.0	1344.0	715.6	1366.0	940.0
(ii) phosphatic (in terms of P_2O_5)	'000 tonnes	421.0	210.0	429.0	320.0	421.0	221.5	421.0	300.0
7. pesticides (basic chemical only)	'000 tonnes	34.0	19.0	59.0	19.0	59.0	19.0	89.0	21.0
8. rock phosphate	mill. tonnes	..	..	..	..	..	0.097	0.2	0.2
9. *Agricultural machinery*									
(i) agricultural tractors	'000 nos	20.0	15.4	20.0	20.0	20.0	18.0	26.0	25.0
(ii) power tillers	'000 nos.	1.5	0.5	2.0	1.0	3.0	0.28	3.0	1.0
10. Newsprint	'000 tonnes	31.5	31.0	75.0	45.0	75.0	38.92	75.0	50.0

ANNEXURE 11.1—*Contd.*

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11.	electronics (selected components, testing & control equipment, wireless & microwave equipment) . . .	Rs. mill.								
12.	iron-ore including pelletisation	mill. tonnes	..	28.7	..	30.0	..	28.0	..	32.0
13.	coking coal	mill. tonnes	..	17.1	..	..	..	17.0	..	17.0
14.	*petroleum*									
	(i) oil exploration & production (production of crude)	mill. tonnes	..	6.06	..	7.3	..	6.7	..	7.1
	(ii) refining capacity in terms of crude throughput .	mill. tonnes	16.25	16.10	19.5	18.0	19.5	18.0	19.5	18.0
15.	*petro-chemicals*									
	(i) D.M.T. . . .	mill. tonnes	..	..	..	..	..	..	..	..
	(ii) caprolactum . . .	mill. tonnes	..	..	..	..	..	..	..	..
	(iii) acrylonitrile . . .	mill. tonnes	..	..	..	..	..	..	..	..
	(iv) synthetic rubber . .	mill. tonnes	30.0	26.0	30.0	28.0	30.0	28.0	30.0	28.0

ANNEXURE 11.2

Capacity & production estimates for 1968-69 & 1969-70 & anticipated capacity & production for 1970-71 for selected industries

sl. no.	industry	unit	1968-69 (actuals)		1969-70 (anticipated)		1969-70 (revised estimate)		1970-71 (anticipated)	
			cap.	prod.	cap.	prod.	cap.	prod.	cap.	prod.
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	*Industrial Machinery*									
	(i) coal & other mining machinery	'000 tonnes	50.0	8.0	50.0	14.0	50.0	15.0	50.0	18.0
	(ii) cotton textile machinery	Rs. mill.	400.0	138.0	450.0	200.0	450.0	204.6	450.0	250.0
	(iii) cement machinery	Rs. mill.	230.0	81.8	230.0	110.0	230.0	98.0	230.0	130.0
	(iv) sugar machinery	Rs. mill.	210.0	118.0	210.0	140.0	210.0	124.2	210.0	150.0
	(v) Heavy fabricated machinery for fertilizer & chemicals	'000 tonnes	..	..	10.0	2.2	10.0	neg. 1	33.0	6.0
2.	*Steel Castings and Forgings*									
	(i) steel castings	'000 tonnes	186.8	50.4	180.0	100.0	126.3	45.9	126.3	50.0
	(ii) steel forgings	'000 tonnes	104.0	44.5	110.0	80.0	147.0	65.0	173.0	75.0
3.	Cranes (excluding mobile cranes)	'000 tonnes	30.0	7.0	30.0	12.0	30.0	5.6	30.0	7.0
4.	ball & roller bearings	mill. nos.	12.74	12.71	15.0	14.0	15.0	14.0	16.0	16.0
5.	heavy pumps & compressors	000 tonnes	..	..	..	..	..	..	..	..
6.	dumpers & scrappers	nos.	..	..	250	155	150	109	250	150

ANNEXURE 11.2—*Contd.*

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
7.	crawler tractors & wheeled loaders	nos.	..	..	880	500	850	900	1200	600
8.	seamless pipes	'000 tonnes	39.6	21.8	65.0	30.0	39.6	24.4	99.6	27.0
9.	gas cylinders	'000 tonnes	..	..	..	..	..	..	..	..
10.	power driven pumps (organised sector)	'000 nos.	350.0	356.0	350.0	350·0	375.0	375.0	400.0	400.0
11.	diesel engines (stationary) (organised sector)	'000 nos.	125.0	118.0	150.0	125.0	150.0	143.0	150.0	150.0
12.	commercial vehicles	'000 nos.	57.6	35.6	57.6	40.0	58.0	35.43	58.0	48.0
13.	motor cycles, scooters mopeds & 3-wheelers	'000 nos.	149.0	84.6	160.0	100.0	160.0	107.11	160.0	140.0
14.	bicycles (organised sector)	'000 nos.	2175.0	1990.0	2175.0	2000.0	2175.0	1950.0	2500.0	2250.0
15.	sewing machines (organised sector)	'000 nos.	450.0	427.0	493.0	450.0	493.0	408.0	493.0	420.0
16.	electric fans (organised sector)	'000 nos.	1810	1481	1900	1600	1816	1555	1820	1680
17.	dry batteries	mill. nos.	469.0	436.4	480.0	460.0	479.0	465.6	557.0	470.0
18.	storage batteries (organised sector)	'000 nos.	950.0	940.0	1240.0	1100.0	1068.0	1003.0	1282.0	1290.0
19.	radio receivers (organised sector)	'000 nos.	1400.0	1489.0	2000.0	1600.0	2330.0	1738.0	2800.0	2100.0
20.	*Electric Transformers*									
	(i) above 33 kv	mill. kv.	5.7	3.5	6.0	4.5	6.0	3.2	6.0	5.0
	(ii) 33 kv & below	mill. kv.	5.2	4.8	5.4	4.0	5.5	3.50	5.5	5.0

21.	*electric motors*									
	(i) above 200 hp	mill h.p.	1.0	0.5	1.10	0.5	1.40	0.25	1.10	0.50
	(ii) 200 h.p. & below	mill h.p.	2.98	2.13	2.70	2.2	2.98	2.16	2.98	2.40
22.	A.C.S.R. conductors	'000 tonnes	94.8	62.5	94.8	70.0	100.0	70.0	100.0	90.0
23.	dry core cables	'000 metres	4000.0	3600.0	8000.0	6000.0	4500.0	4000.0	5500.0	5000.0
24.	*Heavy Chemicals*									
	(i) caustic soda	'000 tonnes	400.0	304.0	450.0	340.0	370.0	346.8	400.0	350.0
	(ii) soda ash	'000 tonnes	430.0	405.0	460.0	420.0	435.0	421.9	435.0	425.0
	(iii) sulphuric acid	'000 tonnes	1900.0	1038.0	2000·0	1200.0	1920.0	1200.0	2000.0	1300.0
25.	paper & paper board	'000 tonnes	730.0	646.6	730.0	650.0	768.0	706.0	813.0	750.0
26.	cement	mill. tonnes	15.4	12.2	15.5	13.5	16.5	13.62	17.5	14.5
27.	automobile tyres	mill. nos.	3.34	3.75	3.7	4.1	3.34	4.0	4.5	4.5
28.	bicycle tyres	mill. nos.	21.29	24.57	26.0	28.0	21.29	21.2	21.29	22.0
29.	oxygen gas	mill. cubic metres	57.58	34.44	60.0	36.0	..	37.5	..	36.0
30.	dye-stuffs	'000 tonnes	12.6	7.51	13.0	8.0	15.5	10.2	16.3	11.0
31.	drugs & pharmaceuticals	Rs. mill.		2000.0						
32.	glass	'000 tonnes	610.0	250.0	625.0	380.0	410.0	224.0	470.0	270.0
33.	refractories	'000 tonnes	1300.0	629.0	1300.0	800.0	1300.0	646.0	1300.0	750.0
34.	soap	'000 tonnes	212.6	218.8	232.8	210.0	212.6	236.0	1300.0	245.0
35.	leather footwear	mill pairs	8.3	21.4	..	19.0	..	16.5	..	20.5
36.	paints & varnishes	'000 tonnes	101.0	65.0	120.0	95.0	..	70.0	..	75.0
37.	*Petro-chemicals and plastics*									
	(i) P.V.C.	'000 tonnes	42.5	20.2	44.0	28.0	42.5	35.0	44.0	58.0
	(ii) polythene	'000 tonnes	39.1	25.2	39.0	26.0	39.1	36.0	39.1	38.0

ANNEXURE 11.2—*Contd.*

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	(iii) polysterene	'000 tonnes	17.5	6.5	17.5	12.0	17.5	9.0	17.5	12.0
	(iv) polypropylene	'000 tonnes	..	..	..	..	..	..	..	..
38.	*cotton textiles*									
	(i) cotton yarn	mill. kg.	17.5[1]	959.0	17.8[1]	1000.0	17.8[1]	955.0	18.0[1]	1000.0
	(ii) cotton cloth (mill sector only)	mill. metres	208.0[2]	4597.0	210.0[2]	4500.0	208.0[2]	4250.0	208.0[2]	4350.0
	(iii) rayon filament (including tyre cord)	'000 tonnes	40.5	37.5	50.5	43.2	..	..	..	..
	(iv) rayon staple fibre	'000 tonnes	67.0	59.97	26.0	64.0	68.0	58.0	68.0	62.0
39.	*synthetic fibres*									
	(i) nylon filament	'000 tonnes	7.3	6.5	7.8	7.5	8.7	8.7	9.8	9.0
	(ii) nylon tyrecord & other industrial yarn	'000 tonnes	4.5	4.7	4.5	4.5	4.5	5.8	4.5	6.0
40.	Polyester filament staple fibre	000 tonnes	..	..	..	..	0.5	0.03	..	..
41.	acrylic fibres	000 tonnes	..	1090.0	1500.0	1050.0	..	950.0	..	1050.0
42.	manmade fabrics	mill. metres	1500.0	1088.0	1500.0	1150.0	1500.0	1100.0	1500.0	1250.0
43.	jute manufacturers	'000 tonnes	43.6	12.6	43.6	11.0	43.6	12.6	43.6	13.0
44.	woollen cloth	mill metres	3303	3559	3800	3700	3556	4300	3750	4200
45.	sugar	'000 tonnes	623.0	466.1	650.0	500.0	820.0	478.1	950.0	525.0
46.	vanaspati	'000 tonnes								

[1]million spindles.
[2]'000 looms.

CHAPTER 12

TRANSPORT AND COMMUNICATIONS

AN outlay of Rs. 556.00 crores has been provided for programmes of transport and communications in 1970-71 as against the Plan outlay of Rs. 447.65 crores in 1969-70. The break-up of plan outlay between the Centre, States and Union Territories for 1970-71 and 1969-70 is as under:—

TABLE 12.1 : *Plan outlay*

(Rs. crores)

	1969-70 outlay	1970-71 outlay
centre	366.29	451.28
centrally sponsored	4.26	4.96
states	62.06	82.42
union territories	15.04	17.34
total	447.65	556.00

12.2. The following table indicates the provision in 1969-70 and 1970-71 by major programmes.

TABLE 12.2 : *Plan outlay on Transport and Communications*—1970-71

(Rs. crores)

	1969-70	1970-71
railways	160.00	180.00
roads	95.17	122.80
road transport	13.54	16.19
ports	30.26	46.11
shipping	20.82	23.79
inland water transport	1.41	2.99
lighthouses	1.06	1.01
civil air transport	34.87	46.70
farakka barrage	18.00	19.00
tourism	7.65	7.59
communications	61.75	86.00
broadcasting	3.12	3.82
total	447.65	556.00

A statement showing the details of the provision for various programmes at Centre and the States and Union Territories is given at Annexure 12.1.

Railways

12.3. After the decline in freight traffic on the railways during 1966-67 and 1967-68, there was a revival in growth of traffic in 1968-69 when the originating traffic amounted to 204.0 million tonnes. The total freight traffic in 1969-70 increased to 208.8 million tonnes as against the expected level of 214.0 million tonnes. It is anticipated that in 1970-71 the freight traffic will increase by 8.3 million tonnes to about 217.1 million tonnes. The following table shows the commodity-wise break-up of the anticipated freight traffic in 1970-71 and in earlier two years:

TABLE 12.3 : *Freight traffic*

(Million tonnes)

	1968-69 actual	1969-70 estimated	1970-71 forecast
1. coal	68.6	71.1	74.8
2. finished steel and raw materials of steel	25.1	23.3	25.3
3. iron ore for export	8.0	9.4	11.5
4. cement	9.4	10.7	11.5
5. railway materials	15.4	16.1	16.0
6. other general goods	77.5	78.2	78.0
grand total	**204.0**	**208.8**	**217.1**

12.4. The passenger traffic on the railways has registered a steady increase over the past years except in 1968-69 when there was a decline. The traffic picked up again in 1969-70 and the total number of passengers originating during the year is reckoned at 2340 millions as against 2213 millions carried in the previous year 1968-69. A further increase of about 3 per cent in the passenger traffic in 1970-71 is anticipated.

12.5. As in the earlier years, the investment programme for the railways in 1970-71 has been formulated to meet the immediate requirements from the operational point of view while also keeping in view the long-term objective of planned development. The following table shows the expenditure on different railway programmes in 1968-69 and 1969-70 and the outlays for 1970-71.

TABLE 12.4 : *Outlay for railway development programmes*

(Rs. crores)

Sl. No.	plan head	actual 1968-69	revised estimate 1969-70	budget estimate 1970-71
(0)	(1)	(2)	(3)	(4)
1.	rolling stock	104.77	107.49	123.69
2.	workshop and sheds	2.61	5.13	5.67
3.	machinery and plant	3.57	4.40	4.84
4.	track renewals	28.01	29.41	33.06
5.	bridge works	4.57	5.05	6.48
6.	line capacity works	35.00	38.53	45.39
7.	signaling and safety	9.81	10.71	11.88
8.	electrification	12.59	14.74	16.55
9.	other electrical works	1.82	1.95	2.36
10.	staff quarters	5.20	5.95	6.14
11.	users' amenities	3.92	4.16	3.92
12.	staff welfare	2.12	2.74	3.15
13.	new lines	14.85	12.41	17.21
14.	other specified works	2.90	3.24	2.85
15.	investment in road services	1.57	1.94	1.98
16.	inventories etc.	–6.60	–4.68	–5.90
17.	metropolitan transport	.	0.13	0.73
	total	**226.11**	**243.30**	**280.00**
18.	*Deduct* expenditure on depreciation account	80.39	89.55	100.00
19.	plan outlay	145.72	153.75	180.00

12.6. The programme for acquisition of rolling stock i.e. locomotives, wagons and coaches including replacement requirements is shown below :

TABLE 12.5 : *Acquisition of rolling stock*

(Members)

	total on line at the end of 1968-69	likely acquisition in 1969-70	programme of acquisition in 1970-71
locomotives			
steam	10,046	74	38
electric	513	31	55
diesel	996	115	147
wagons (in terms of four wheelers)	464,902	14,918	18,210
coaching stock (including EMU)	34,291	1,493	1,412

12.7. As in the earlier three years, a major part of the outlay provided for the works programmes is proposed to be utilised on the works already in progress. However, certain major new works relating to doubling of track, electrification and new lines will also be taken up during the year. The more important sections on which doubling is proposed in the 1970-71 plan are: (1) Tadali-Majri portion of the Wardha-Balharshah section, (2) Barwadih-Garhwa Road section, (3) Shakurbasti-Rohtak section, (4) patch doubling of three sub-sections of Vijayawada-Nidadavolu section, (5) Chintalapalli-Nokonda portion of the Dornakal-Kazipet section, (6) Hadapsar-Patas portion of the Poona-Dhond section and (7) remaining single line portions of 37.46 kms. on the Baroda-Godhra section. The programme also provides for construction of a new broad gauge line of 24 kms. between Tornagallu and Madukulapenta in Mysore for providing access to the Donamalai reserves of iron ore and the electrification of the Panchkura-Haldia and the Waltair-Kirandul sections of the South Eastern Railway. The studies in respect of the metropolitan rail transport schemes which were taken up last year, namely, Suburban Dispersal Line and Rapid Transit System in Calcutta will be proceeded with. Provision has also been made for techno-economic feasibility studies for mass rapid transit system in Bombay.

Roads

12.8. The provision of Rs. 44.44 crores for 1970-71 for development of roads in the Central sector includes Rs. 28.10 crores for the development of national highways (including National Highway portion of Lateral Road), Rs. 8.00 crores for the Lateral Road, Rs. 5.50 crores for special roads and Rs. 2.84 crores for roads of inter-State or economic importance. The provision of Rs. 28 crores for the development of national highways includes Rs. 15 crores for the continuing schemes and Rs. 13 crores for the new schemes.

12.9. During 1969-70, 1000 kilometres of existing national highways were improved with widening and construction of 37 kilometres of missing links, and 6 major bridges were completed. Among the major bridges completed during the year, mention may be made of the bridge near Humayun Tomb in Delhi, Sankaranbarani bridge in Tamil Nadu, Yamuna bridge at Agra and the bridge across Sabramati at Ahmedabad. The development of national highway programme in 1970-71 provides for taking up of construction of 385 kms. of missing links, 3 major bridges, reconstruction of 24 major bridges, widening and Strengthening 2000 kms. of roads.

12.10. In the State sector a provision of Rs. 78.36 crores has been made in 1970-71 for road development programmes. This marks a substantial step up over the plan outlay of Rs. 59.76 crores in 1969-70. A large part of the provision will be utilised for schemes already in progress. However, provision has also been made for construction of new roads, particularly in backward areas and in metropolitan cities. It is estimated that about 25 per cent of the allocation for road development in the State Plans will go for the development of rural roads.

Road Transport

12.11. The existing fleet of State Road Transport Undertakings constitutes about 40 per cent of the total number of passenger buses in the country. A provision of Rs. 15.72 crores has been made in the State Plans in 1970-71 for the State Undertakings against Rs. 13.19 crores in 1969-70. In the Central Plan a provision of Rs. 40 lakhs has been made for the Central Road Transport Corporation and Rs. 7 lakhs for assistance to the Central Road Transport Research Institute, Poona.

Major Ports

12.12. The volume of the traffic to be handled by major ports is estimated to increase from about 55 million tonnes in 1969-70 to about 60 million tonnes in 1970-71. The main increase in the traffic in 1970-71 is expected to be on account of increased export of iron ore through Visakhapatnam and Paradeep Ports. A large part of the provision for 1970-71 is for the projects already underway e.g. Haldia Dock, Madras Oil Dock Scheme, Dock Expansion Scheme at Bombay and Mangalore and Tuticorin projects. The Haldia Dock is expected to be completed in early 1971. The Dock Expansion Scheme at Bombay, on which substantial progress has been made, is expected to be completed by March 1972. The Madras Oil Dock Scheme is expected to be completed by the end of 1970-71. Tempo of work on Mangalore and Tuticorin projects has been accelerated. Other important works on which substantial progress is expected to be made during 1970-71 are river training works in Bhagirathi and Hooghly which have been taken up with a view to obtaining optimum benefit from the Farakka Barrage Project, Visakhapatnam Outer Harbour for handling deep draft ore carriers, provision of mechanical ore handling facilities at Madras and modernisation of Mormugao Port. For the Central Dredging Organisation two dredgers have been ordered for which a provision of Rs. 6.43 crores has been made in the Annual Plan 1970-71. The table at Annexure 12.2 gives the port-wise provisions in the Annual Plan 1970-71.

Minor Ports

12.13. In the Central Plan a provision of Rs. 46 lakhs has been made for purchase of additional survey launches and for payment in respect of other equipment for Minor Ports Dredging and Survey Organisation. A provision of Rs. 116 lakhs has been made for the development of works relating to minor ports in Andman and Nicobar Islands and Rs. 18 lakhs for minor ports in Laccadive, Amindivi and Minicoy Islands. These are in addition to provision for the development of minor ports in these Islands in the Administrations' Plans. Further a provision of Rs. 160 lakhs has been made in 1970-71 for granting loans for development of minor ports as at Porbandar, Mirya Bay, Cuddalore and Kakinada under the Centrally sponsored programme.

Shipping

12.14. At the end of 1969-70 the total Indian tonnage was 2.34 million grt consisting of 0.32 million grt of coastal tonnage and 2.02 million grt of overseas tonnage. Further, shipping tonnage amounting to about 0.6 million grt was on order or under construction. Of the total tonnage, the Shipping Corporation of India owned 0.70 million grt or about 30 per cent of the total fleet. At present Indian shipping tonnage caters for about 20 per cent of the overseas trade. During 1970-71, it is proposed to place orders for acquisition of about 6 lakh grt. A provision of Rs. 14.36 lakhs has also been made for welfare of seamen.

Inland Water Transport

12.15. The main programme in the Central sector for inland water transport is for the Central Inland Water Transport Corporation. The total provision in 1970-71 is Rs. 243 lakhs which includes Rs. 125 lakhs for the Rajabagan Dockyard at Calcutta. A provision of Rs. 52 lakhs has been made for loans to State Governments for Centrally sponsored schemes of this about Rs. 20 lakhs is required for the scheme in progress particularly in Kerala and Rs. 30 lakhs for new schemes relating mainly to widening and deepening of the Cumberjua Canal in Goa. In State Plans provisions have been made for the development of inland water transport in Kerala, Assam, Goa and Andhra Pradesh.

Lighthouses

12.16. A large part of the provision for lighthouses is for the works in progress. Construction works at 6 major lighthouses are expected to be completed. A new light house tower at Madras is proposed to be constructed during the year.

Farakka Barrage

12.17. The total cost of the project is estimated at Rs. 156 crores against which the expenditure incurred upto the end of 1969-70 is estimated at Rs. 95 crores. A provision of Rs. 19 crores has been made in the Annual Plan 1970-71 for further work.

Tourism

12.18. There was a substantial increase in the number of foreign tourists visiting India in 1969. As against 1,89,000 tourists who visited India in 1968, the number of foreign tourists in 1969 was 2,45,000. A provision of Rs. 7.59 crores has been made in the Annual Plan 1970-71 for the development of tourism which includes Rs. 5.37 crores for Central schemes and Rs. 2.22 crores for schemes in the State Plans and Union Territories. In the Central Plan provision has been made for the development of Gulmarg and Kovalam as tourist resorts. It is proposed to construct youth hostels at Jaipur, Madras and Aurangabad. Provision has also been made for mounting Son et Lumiere at Sabarmati, Ahmedabad and Shalimar Garden, Srinagar. Further, it is proposed to purchase launches for Govindsagar, Nagarjunasagar and Cochin backwaters. A provision of Rs. 150 lakhs has been made for loan assistance for construction of hotels in the private sector. The programme of the India Tourism Development Corporation provides for completion of the hotel project at Bangalore. For a number of other hotel projects, feasibility studies have been carried out and architects have been appointed. It is proposed to open new transport units at Agra, Chandigarh, Lucknow, Varanasi, Bangalore and Hyderabad. A number of travellers lodges are proposed to be renovated.

Civil Air Transport

12.19. The programme of the Civil Aviation Department for 1970-71 provides for the development of international airports including extension or strengthening of the runways at Delhi and Bombay and modification to terminal buildings and construction of aprons at Delhi, Bombay, Calcutta and Madras. The plan envisages development of domestic airports including construction of a new terminal building and strengthening of the existing main runway at Begampet aerodrome and acquisition of land for construction of an aerodrome at Calicut. Provision has been made for taking up works relating to construction of aerodrome at Tirupati and the development of aerodrome at Barapani. Development of aeronautical communication services has also been provided for. A total provision of Rs. 10.24 crores has been made for programmes of the Civil Aviation Department.

12.20. For Indian Airlines, the Plan provides an outlay of Rs. 21.72 crores of which the Government is expected to advance a sum of Rs. 14 crores and the balance of Rs. 7.72 crores is expected to be made available by the Corporation from its internal resources. The Plan includes provision for payments due in 1970-71 for aircraft already acquired or ordered and payments for the seven Boeing 737 aircraft proposed to be acquired. In 1970-71, the Corporation expects to receive five Boeing 737 aircraft. The capacity on the Indian Airlines is expected to increase from 223 million tonne kilometres in 1969-70 to 245 million tonne kilometres in 1970-71.

12.21. A provision of Rs. 12.25 crores has been made for Air India of which the Government is expected to contribute a sum of Rs. 5 crores and the balance of Rs. 7.25 crores is expected to be made available by the Corporation from its internal resources. Bulk of the provision included in the Plan, viz., Rs. 6.8 crores is for payments for aircraft already purchased or ordered. This includes Rs. 2.5 crores for payments for the 747 aircraft (Jumbo Jets) already ordered, one of which is expected to be received in March-April 1971. The administrative building for Air India at Bombay will be completed during the year. The capacity provided by Air India is expected to increase from 511 million tonne kilometres in 1969-70 to 540 million tonne kilometres in 1970-71.

Meteorology

12.22. The main schemes for meteorology included in the Plan relates to the establishment of a regional Telecommunication hub at New Delhi as part of the World Weather Watch scheme. Provision has been made for other schemes like modernisation of observatories, development of the Kodaikanal Observatory, development and improvement of the Forecasting and Research Organisation. A total provision of Rs. 2.27 crores has been made for the development of meteorology.

Communications

12.23. The Plan provides for the opening of 6200 new post offices in 1970-71. Under Telecommunications, additional 109,000 telephone connections have been envisaged. About 500 additional telegraph offices and 400 long distance public call offices are proposed to be opened during the year. The outlay on schemes relating to Posts and Telegraphs Department during 1970-71 is Rs. 83 crores, of which the Department is expected to find about Rs. 48 crores from its internal resources. The balance

amount of Rs. 35 crores is expected to be given by the Government of India as loan to the Department.

12.24. The production of telephones at Indian Telephone Industries Limited is expected to increase to 2.74 lakh telephones in 1970-71 against 2.29 lakh telephones in 1969-70. The financial provision required for the expansion of the Indian Telephone Industries is expected to be fully met from the Company's internal resources. The construction of a new factory for the manufacture of long distance transmission equipment is proposed to be taken up in the year for which a budget provision of Rs. 1 crore has been made for advance as loan. The Hindustan Teleprinters Limited is expected to finance its plan entirely from internal resources and the estimate of production of teleprinters in 1970-71 is 6500 units. Under Overseas Communications Service, the Plan envisages the completion of the Satellite Earth Station at Arvi and the International Telecommunication Centre at Bombay. Preliminary work will also be taken up for the establishment of Satellite Earth Station and Telecommunication Centre in the northern region.

Broadcasting

12.25. A provision of Rs. 3.82 crores has been made in 1970-71 for the development of broadcasting. During the year, high powered medium wave transmitters are expected to be commissioned at Simla, Jodhpur, Alleppey and Imphal. A transmitter of higher power would be installed at Bombay for the commercial services. External services are expected to be strengthened by the commissioning of the super-power medium wave transmitter at Rajkot and the two high powered short wave transmitters at Aligarh. During the year, works connected with the installation of the high power transmitters a Kohima, Gorakhpur, Kumaon Region and the studio projects at Dibrugarh, Baroda, Bhuj and Kohima would be continued. Preliminary works like the acquisition of sites and preparation of the estimates would be taken up during the year for the schemes relating to installation of transmitters at Rohtak, Rewa, Chhatarpur and Jagdalpur. Work on television centres at Srinagar and Bombay is expected to be commenced during the year.

ANNEXURE 12.1

Outlay on Transport and Communications during 1969-70 *and* 1970-71

(Rs. crores)

Scheme		1969-70	1970-71
(1)		(2)	(3)
railways	centre	**160.00**	**180.00**
roads	centre	32.46	41.60
	centrally sponsored	2.95	2.84
	states	48.06	64.95
	union territories	11.70	13.41
	Total	**95.17**	**122.80**
road transport	centre	0.35	0.47
	states	10.98	13.16
	union territories	2.21	2.56
	Total	**13.54**	**16.19**
major ports	centre	**25.70**	**40.20**
minor ports	centre	1.79	1.80
	centrally sponsored	1.00	1.60
	states	1.49	1.93
	union territories	0.28	0.58
	Total	**4.56**	**5.91**
shipping	centre	20.62	23.62
	union territories	0.20	0.17
	Total	**20.82**	**23.79**
inland water transport	centre	0.65	1.91
	centrally sponsored	0.31	0.52
	states	0.16	0.26
	union territories	0.29	0.30
	Total	**1.41**	**2.99**
lighthouses	centre	**1.06**	**1.01**
civil air transport	centre	34.62	46.48
	states	0.08	0.13
	union territories	0.17	0.09
	Total	**34.87**	**46.70**

(1)	(2)	(3)	
farakka barrage . . .	centre	18.00	19.00
total transport	centre	295.25	356.09
	centrally sponsored	4.26	4.96
	states	60.77	80.43
	union territories	14.85	17.11
	Total	375.13	458.59
tourism	centre	6.17	5.37
	states	1.29	1.99
	union territories	0.19	0.23
	Total	7.65	7.59
communications	centre	61.75	86.00
broadcasting . . .	centre	3.12	3.02
grand total	centre	366.29	451.28
	centrally sponsored	4.26	4.96
	states	62.06	82.42
	union territories	15.04	17.34
	Total	447.65	556.00

ANNEXURE 12.2

Major Ports provision for the Annual Plan 1970-71

(Rs. lakhs)

(0)	(1)	(2)
1.	Haldia	1000.00
2.	Madras	400.00
3.	Cochin	150.00
4.	Visakhapatnam Outer Harbour	150.00
5.	Kandla	100.00
6.	Mormugao	250.00
7.	Paradeep	250.00
8.	Mangalore	425.00
9.	Tuticorin	425.00
10.	Bhagirathi Hooghly River Training Works	227.60
11.	Central Dredging Organisation	642.74
	total	**4020.34**

CHAPTER 13

EDUCATION

PLAN outlay on education in 1969-70 was Rs. 96.80 crores. Agninst this, Plan outlay for 1970-71 is Rs. 123.13 crores. The break up by Centre, Centrally Sponsored, States and Union Territories and for general and technical education is given as under:

TABLE 13.1 : *Plan outlay on Education*

(Rs. crores)

	general education		technical education	
	1969-70	1970-71	1969-70	1970-71
centre	24.74	34.86	8.25	8.68
centrally sponsored . . .	2.64	2.15	4.53	4.24
states	42.81	56.64	7.62	8.11
union territories . . .	5.44	7.55	0.77	0.90
total . . .	**75.63**	**101.20**	**21.17**	**21.93**

13.2. The targets of additional enrolments at various stages during the Fourth Plan, the estimated achievement in 1969-70 and the tentative targets for 1970-71 are :

TABLE 13.2 : *Additional enrolment*

(in millions)

S.NO.	1969-74 targets	1969-70 estimated achieve-ment	1970-71 tentative targets
(0) (1)	(2)	(3)	(4)
1. Classes I-V	13.09	2.17	3.09
2. Classes VI-VIII	5.83	0.94	1.41
3. Classes IX-XI	3.11	0.53	0.73
4. University education (arts, science and commerce courses)	0.97	0.175	0.20

It is estimated that the percentages of children attending primary, middle and secondary classes to the total population in the age-groups 6—11, 11—14 and 14—17 will by 1970-71 be 80.4, 36.1 and 21.6 respectively as against the provisional achievement in 1969-70, *viz.* 78.2, 33.6 and 20.2 respectively and the target for 1973-74, *viz.* 85.3, 41.3 and 24.2 respectively.

Elementary Education

13.3. The Fourth Plan gives a high priority to the expansion of educational facilities in the backward areas, the enrolment of girls and children of backward communities and the implementation of a core programme of qualitative improvements. Accordingly, the main effort during 1970-71 will be to expand educational facilities in the backward areas. Provision has been made for special schemes to encourage girls' education, to increase the coverage under the school-feeding programme and to supply free text-books to poor children. Pilot projects will be started in over 600 primary and 400 middle schools all over the country for improving the teaching of science. Some of the other highlights of the development programmes in the States are : the opening of 40 continuation classes for girls at the middle stage in Uttar Pradesh, the appointment of graduate teachers as headmasters of senior primary schools in Mysore, and the provision for incentive payments and awards to teachers in Tamil Nadu.

13.4. It is proposed to implement Intensive Educational District Development Projects in four districts namely Sangrur (Punjab), Darbhanga (Bihar), Belary (Mysore) and Jalgaon (Maharashtra). The general objectives of these projects are : (a) to identify and try out concrete programmes for linking the educational structure in the district with its overall economic and social development, (b) to experiment with vocationalisation of education in schools, (c) to experiment in dealing with problems of education of girls and children of scheduled castes and tribes, wastage and stagnation, and adult literacy, and (d) to achieve these objectives with minimum additional funds and the maximum use of existing facilities and the mobilisation of public support for these programmes.

Secondary Education

13.5. Adequate provision has been made to cope with additional enrolments at this stage. Provision has also been made in most States for the strengthening of science education and for the improvement of physical facilities in schools. The Maharashtra Government proposes to implement a pilot project for occupational

education in selected places where a preliminary feasibility study has been conducted. In Uttar Pradesh, special grants will be paid for the establishment of text-book libraries. In Rajasthan, provision has been made for introducing more courses in agriculture and commerce.

Teacher Education

13.6. While expansion of training facilities will be restricted to a few States in the eastern region where the number of untrained teachers is still quite large, in some other States the training facilities may have to be curtailed owing to excess supply of teachers. In-service training programmes, particularly for science and mathematics teachers, will be emphasised. Provision has been made for the development of the activities of the State Institutes of Education and the National Council of Education Research and Training.

Higher Education

13.7. The University Grants Commission will provide special assistance to 28 additional university departments for eventual development as Centres of Advanced Study. Programmes of students' and teachers' welfare in universities and colleges will be strengthened. The University Grants Commission will also arrange seminars and orientation courses for teachers. A new university is expected to be set up in Himachal Pradesh. The quantum of loans advanced to the State Governments towards construction of hostels for affiliated colleges will be stepped up. In pursuance of the recommendations of the Committee on Rural Higher Education, the Rural Institutes will undertake problem-oriented research in the fields in which the Institutes provide courses of study and will also organise extension education by the application of scientific knowledge and techniques to rural problems.

Social Education

13.8. Thirty five additional districts will be covered under the integrated programme of Farmers' Training and Functional Literacy, which is being implemented jointly by the Ministries of Education and Youth Services, Food and Agriculture and Information and Broadcasting. Thus 60 districts would be covered under this programme by the end of 1970-71 out of a target of 100 districts in the Fourth Plan. Pilot literacy projects will be implemented in collaboration with State Governments in selected areas in order to find out the relative effectiveness of the programmes of the eradication of illiteracy.

Languages

13.9. The Ministry of Education and Youth Services will provide assistance for the appointment of Hindi teachers and the establishment of Hindi teachers training colleges in the non-Hindi speaking States. The Central Institute of Indian Languages has already been set up in Mysore for conducting inter-linguistic research, for training translators and for the production of appropriate literature. Four regional institutes will be established at Mysore, Bhubaneshwar, Poona and Patiala to train graduate teachers for seconday schools in the teaching of modern Indian languages other than Hindi. Assistance will be given for the production of literature in regional languages at the university level. The publication of core books especially in technical subjects including medicine, will be taken up.

Cultural Programmes

13.10. Provision has been made for the development of the Namgyal Institute of Tibetology, Gangtok, the Daraitul-Maarif-il-Osmania, Hyderabad, the Institute of Higher Tibetan Studies, Varanasi, the Nav Nalanda Mahavihara, Bihar and the school of Budhist Philosophy, Leh. Building grants will be given to a number of voluntary cultural organisations Assistance will be given to the three National Akademis for their developmental activities. The major activities under the scheme of Gazetteers will be the publication of the second volume of Gazetteer of India : "History and Culture", the compilation of a the Gazetteer of Bhutan and the publication of "Who's Who of Indian Martyrs", Volume II. A new scheme for the compilation and publication of the Cultural Heritage Series in 27 volumes—one volume for each State and Union Territory—will be started during the year with a view to promoting national integration.

Technical Education

13.11. Under technical education, stress will continue to be laid on the consolidation of facilities like buildings, equipment and staff in educational institutions. In Osmania University, Hyderabad, Indian Institute of Science, Bangalore and I.I.Ts at Kharagpur and Bombay, the work of establishing Centres of Advanced Study in exploration and geophysics, electronics and automation, metallurgy and aeronautical engineering respectively will be initiated. The project reports of the four technical schools for training of technicians in metallurgy, heavy engineering, electrical machine building and oil and gas industry have been finalised and the preparatory work for their establishment will be started. For the improvement of the quality of technical education,

new schemes relating to dectoral programmes, in-service orientation courses, short-term training-in-industry programmes for serving teachers and the setting up of curriculum development groups for degree and diploma courses on a pilot basis will be taken up. Programmes relating to the diversification of courses at the degree and diploma levels will be stepped up. The expanded programme of practical training stipends scheme will be continued and the machinery for supervision and guidance will be strengthened. Post-graduate education and research in university departments, in the Indian Institutes of Technology, in the Regional Engineering Colleges and in other institutions will be strengthened. Part-time degree and diploma courses will be continued.

Other Programmes

13.12. The present schemes of scholarships administered by the Central Government, namely the National Scholarships scheme, the National loan scholarships, scholarships for the children of school teachers and merit scholarships in residential schools will be stepped up. A scheme of scholarships in the fields of music, dance, painting and sculpture, to be awarded to school-going children between the ages of 10—14 who are exceptionally gifted in any of these arts, will be started by the Ministry of Education and Youth Services during the year. The University Grants Commission will provide fellowships for post-graduate education and research. In addition, a large number of scholarships, stipends and free studentships will be provided to poor and deserving students at all levels of education by the State Governments and Union Territories. The scheme of assistance to voluntary organisations has been modified to concentrate on liberally-assisted significant projects taken up by well-eastablished organisations. The National Book Development Board is expected to complete the survey of the book industry, and the publication programme of the Ministry of Education and Youth Services and of the autonomous organisations under the Ministry. One of the three textbook printing presses, to be installed in the Fourth Plan, is expected to start functioning at Chandigarh during 1970-71. About one lakh students will be covered under the National Service Scheme on a selective basis. Under the scheme for the welfare of non-student youth, it is proposed to open one urban and two rural youth centres in each State. The scheme of inter-State exchange of students will be organised to promote national integration. The coverage under the National Physical Efficiency Drive will be increased.

CHAPTER 14

SCIENTIFIC RESEARCH AND NATURAL RESOURCES

I. Scientific Research

An outlay of Rs. 23.61 crores has been provided for scientific research in 1970-71 as against the Plan outlay of Rs. 21.60 crores in 1969-70. The detailed break-up of Plan and non-Plan outlays for 1970-71 and estimated expenditure for 1969-70 for various departments are :

Table 14.1 : *Outlay on Scientific Research*

(Rs. lakhs)

	1969-70			1970-71		
	Plan	non-Plan	total	Plan	non-Plan	total
(i) Deptt. of Atomic Energy (R & D)	1240	1585	2825	1327	1960	3287
(ii) Council of Scientific and Industrial Research	685	1326	2011	850	1373	2223
(iii) Ministry of Education and Youth Services (Scientific Surveys and Development Division)	235	604	839	184[1]	654	838
total	**2160**	**3515**	**5675**	**2361**	**3987**	**6348**

[1]Excluding capital outlays on public works.

Department of Atomic Energy (R and D)

14.2. The main features of important projects or programmes of the Department of Atomic Energy (Research and Development) are described in the following paragraphs.

Bhabha Automic Research Centre (BARC) :

14.3. Under the Centre a High Intensity Radiation Utilisation Project is being established. It envisages the construction of megacurie cobalt-60 handling and storage facilities along with

associated laboratories for the development and application of large radiation sources. Designs of the hot-cell and storage facilities have been completed. Civil works have commenced. The project is scheduled for commissioning in December 1971. A Zero Energy Fast Reactor is being set up to provide high intensity neutron sources for cross section measurements related to breeder reactors. Building and reactor designs for this facility have been finalised. The reactor is expected to be completed during 1970-71. Work on the establishment of two commercial scale irradiation facilities at two different centres, one for irradiating potatoes and onions and the other for irradiating fish is expected to commence during 1970-71. Among the important research and development programmes to be undertaken during 1970-71 at Bhabha Atomic Research Centre, mention may be made of—

(*a*) nuclear chemistry work, fuel burn-up studies, molten salt breeder reactor concept ;

(*b*) research pertaining to preservation of seafoods, potatoes, onions and grains through irradiation ; development and field work in connection with food irradiation ;

(*c*) development of uranium carbide, tungsten and silver composites, fabrication of Invar Kovar wires ; and

(*d*) development of new solvents for thorium reprocessing.

Variable Energy Cyclotron

14.4. This project, which is being established at Calcutta, will serve as a national centre for high quality research work in nuclear physics and for controlled direct radiation of biological and agricultural products. Civil works are nearing completion and work on pile foundations has commenced. The main equipment, namely, AVF Cyclotron, is proposed to be built from parts fabricated at Bhabha Atomic Research Centre, Heavy Engineering Corporation, Ranchi and Heavy Electricals, Bhopal.

Reactor Research Centre, Kalpakkam

14.5. The centre will provide facilities for the development and design of fast breeders. Work on the construction of engineering halls and facilities like workshop, stores, designs office, water supply and power supply arrangements is in progress. The laboratories are expected to be commissioned during 1970. A team of Indian engineers and scientists is in France for the preparation of project report for a prototype fast breeder reactor in collaboration with the Commissariat L'Energie Atomique.

Space Research

14.6. A rocket fabrication facilitity is being established at Thumba to manufacture indigenously Centaure and other types of rockets. The rocket propellant plant to manufacture preopellant grains was commissioned in February 1969. Work on the establishment of a station capable of launching multi-stage rockets and satellites has been taken-up at Sriharikota in the east coat. While facilities for satellite launchings at this range are expected to be completed in the next three years, a sounding rocket launching facility is expected to be completed within the next six months. The Space Science and Technology Centre conteiued its developmental work on the Rohini series of rockets and connected propellants. Feasibility studies have been completed for the development of a satellite launch vehicle having a capability of putting 30 kg. payload into 400 km. near circular orbit. Special composite materials for propellants have also been developed. A complete set of instrumentation for evaluating performance of rocket motors and control components has been developed. The Experimental Satellite Communication Earth Station at Ahmedabad is being expanded to include new facilities, like antenna, testing range and new equipment like three metre diameter parabolic reflector used for terrestrial micro-wave links. The station's capability has been augmented by incorporation of a VHF tracking system.

Scientific Societies and Institutes

14.7. The Tata Institute of Fundamental Research, Bombay will continue its various research projects in the field of microwave engineering, solid state electronics, radio carbon dating, and computer development. The physical Research Laboratory, Ahmedabad will continue development studies in cosmic rays, solar-terrestrial relationships, aeronomy, geomagnetism, theoretical physics concerning problems of nuclear structure, plasma physics and space physics. The Saha Institute of Nuclear Physics, Calcutta will collaborate closely with the Department of Atomic Energy in building up of cyclotron for the variable energy cyclotron project. The Tata Memorial Centre, Bombay will undertake studies for the assessment of the results of various therapeutic procedures for the treatment of cancer. A programme for the expansion of the Centre to coordinate research work with other bodies and institutions and to train doctors and students from other hospitals and institutions is also being initiated.

14.8. Under housing, the current phase of the Trombay Township Project will be almost completed by 1970-71. In addition work will be undertaken on Trombay township (Phase II) and Colaba housing Colony, Secretariat housing and Khasmahal colony.

14.9. The Atomic Minerals Division will intensify work for survey, prospecting and exploratory development of atomic minerals like uranium, thorium, beryllium and tantalum.

Council of Scientific and Industrial Research (CSIR)

14.10. During the first year of the Fourth Plan, CSIR has laid emphasis on projects which would yield quick results, specially those aimed at export promotion, increased productivity and cost reduction. A Committee under the Chairmanship of Member (Industry), Planning Commission has been set up to provide guidelines to the laboratories in planning their programmes so that resources are used to more practical advantage. Some of the important programmes and pilot plants of national laboratories under CSIR are described in the paragraphs that follow.

Electronics and Instrumentation

14.11. This programme includes research work on materials for transistor and electronics industry such as semi-conductor grade silicon and ferrites and transmitter type high voltage capacitors. Further development work on high fidelity radiogram, tape recorder, industrial television camera, television pattern generator, television service oscilloscope and power triodes, is in progress. Work has been initiated on medical instruments such as fetus blood flow detector, echo encephalograph, ultrasonic therapy unit, patient monitoring system and cardiac therapeutic instruments, flow and liquid level instruments, gas analysers, servo components, temperature indicators and pyrometers, photographic and projection equipment, electro optical instruments, optomedical instruments, specialised optical components and machinery, and optical glass working machinery.

Mechanical Engineering

14.12. Several sponsored research and development projects have been in progress such as a 20 hp. tractor with matching implements, a 6.5 h.p. diesel engine, hydraulic dynamometers of capacity more than 100 h.p., air hydraulic filters and automobile radiators. The development of high pressure vessels, vacuum system and gauges, equipment for industrial gases, electric overhead travelling cranes with minimum weight and cost, high speed gear boxes, fluid coupling and high temperature creep testing equipment has been taken up.

Structural Engineering

14.13. Projects for pre-casting and pre-fabrication aimed at reduction in cost and speedier construction, high strength deformed

bars in reinforced concrete and grain storage structures have been taken up.

Road Engineering

14.14. Pilot schemes have been taken up for design and strengthening of flexible and rigid pavements on which laboratory work has already been completed.

Chemical Technology

14.15. The programme initiated includes process development work for bulk organic chemicals based on the by-products of the petro-chemical industry, alkali metal complex hydrides and grignard reagent, studies on silicones and formulations, sulphochlorinated polyethylene and polyolefin elastomers, non-cellulosic synthetic fibres by wet and melt spinning, polymer technolgoy including small tonnage polymers and reinforced plastics. In the field of electrochemistry, the programmes include setting up of a pilot plant for electrolytic production of magnesium metal, anodic phosphating on pilot plant scale and upscaling of the design and operation of the electrolytic cell for aminoguanidine bicarbonate.

Petroleum Crudes and Products

14.16. Work on pilot plant processing of crudes for lubricating oils, thermal conversion processes to reduce heavy fuel oil and produce light and middle distillates, reforming of iomex, steam reforming of naphtha for town gas, hydroprocessing of petroleum fractions, catalytic reforming and production of high impact polystyrene has been initiated.

Fuels, Coal and Coal Products

14.17. Pilot plant for formed coke for metallurgical, industrial and domestic uses, and pilot plant for production of oils and chemicals by hydrogenation of Assam coals, are some of the programmes initiated. Studies on fluidised bed carbonisation of coal LTC by-product processing to obtain antiseptics and disinfectants, cation exchange resin and electrode binder will be carried out.

Metallurgy

14.18. Pilot plant studies on recovery of nickel from lateritic and other low grade ores, cryolite production from fluorspar and magnesium production (250 tonnes per year capacity) are being initiated.

Glass and Ceramics

14.19. Expansion of the existing optical glass plant is being taken up in view of the growing demand. The work on synthetic quartz crystals, radiation shielding windows, glass to metal seals, electronic ceramic parts, reconstituted mica paper and glass bonded mica for capacitors and investigations on new types of optical glasses have been taken up.

Food Technology

14.20. The programmes initiated relate to rice milling and utilisation of rice bran to increase the availability of edible oils and protein rich bran for cattle feed setting up of prototype pilot plant for production of spice extractives and oleoresins, and development and application of improved techniques for cereal storage in rural areas.

Aeronautical Research

14.21. The programmes are aimed at generating basic data and undertaking such developmental work as will be useful to the indigenous aeronautical industry. Aerodynamic facilities including trisonic wind tunnels have been commissined. Facilities in propulsion, structures and materials field are being set up.

Building Engineering

14.22. The projects in progress include a pilot plant for testing clays for mechanical production of bricks, evaluation and processing of clay for bloated clay and aggregate manufacture and studies on magnesium oxychloride based building materials.

Biomedical Sciences

14.23. Studies on constituents of biological significance from medical plants are being carried out. Work has been initiated on process development for paracetamol, choline chloride, lecithin, procanine and sphedrine, and indigenous production of colchicine has been taken up.

Leather Technology

14.24. Work has been continued on development and improvement of raw hides and skins, tanning materials, tanning and finishing process, leather ancillaries, footwear, and leather goods and pilot plant for the manufacture of products developed from slaughter houses, tannery wastes, tanning extracts and fat liquors.

14.25. Under the Council's scheme of grants-in-aid to various universities and research institutions other than CSIR laboratories, six hundred and twenty-seven research schemes with a provision for 751 research fellows are in progress, and 1543 *ad hoc* research fellows are pursuing research. Of these 460 hold senior fellowships and 1083 hold junior fellowships.

14.26. Under the scheme of grants-in-aid to industrial research associations, nine research associations (four in textile and one each in plywood, tea, wool, cement and jute indutry) are functioning. Provision has been made for research associations for paint, rubber and automobile industry. Ahmedabad Textile Industry Research Association is fabricating sub-catcher gauge, with the aim of reducing breakages during warping and weaving, for semi bulk scale evaluation under mill conditions. Silk and Art Silk Mills Research Association, Bombay completed development of a pilot scale laminating machine as a part of the programme on the development of foam backed textiles. South India Textile Research Association, Coimbatore is investigating blending of cotton with various man-made fibre like viscose, polynosics and polyester staple fibre with the object of finding the possibility of using a lower proportion of terene staple fibres than at present. Wool Research Association, Bombay is carrying out work on evaluation of the characteristics, processing performance and end-use suitability of Indian wools and or determination of factors responsible for the harsh feel and stiff handle of coarse wools and development of methods to remove the same.

Ministry of Education and Youth Services (Scientific Surveys and Development Division)

Survey of India

14.27. Under the Survey of India provision has been made for two new schemes (*i*) map reproduction and cartography and (*ii*) surveys for irrigation and power projects and mineral exploration in addition to continuing schemes such as Centre for Survey Training and Map Production, Hyderabad, and Indian Photo-Interpretation Institute, Dehra Dun.

14.28. Programmes of the Botanical Survey of India include institution of scheme of Research scholarships. In addition provision has been made for setting up a regional circle at Andaman and Nicobar Islands.

Zoological Survey of India

14.29. During 1970-71 provision has been made for the scheme of strengthening of High Altitude Zoology Field Station at Solan and establishment of Marine Biological Station at Madras.

Anthropological Survey of India

14.30. In addition to continuing research projects already started, it is proposed to set up a Zonal Museum at Jagadalpur (M.P.) where cultural life of the people of the area will be emphasised. Provision has also been made for scheme of collaborative research with Universities and for an increase in the number of research fellowships.

14.31. The proposals from the National Atlas Organisation include schemes to bring out a tourist atlas of India and to raise two field research stations to conduct geo-economic surveys with particular reference to geomorphology, geography of soil and land use.

Scientific societies and institutions and grants for scientific research

14.32. Provision has been made for the development schemes of Indian Association for the Cultivation of Science, Bose Institute, Birbal Sahni Institute of Palaeobotany and Maharashtra Association for Cultivation of Science, Indian National Science Academy and Indian Science Congress Association. The Institute of Himalayan Geology has been set up for providing intensive training and research facilities. A scheme for encouraging basic scientific research and research training was instituted; the scheme has yet to gather momentum.

14.33. The prototype plant for production of activated carbon which was set up by the National Research Development Corporation at Regional Research Laboratory, Hyderabad has been sold to a firm. An offer of a firm for undertaking commercial exploitation of the process for manufacture of insecticide lindane was accepted. The process would be licensed to other parties also. For establishing indigenous manufacture of silicon carbide, a feasibility report was prepared with the help of consulting engineers on the basis of a process developed at Regional Research Laboratory, Hyderabad.

II. Natural Resources

14.34. The work of pre-investment survey of forest resources undertaken over an area of 25,000 sq. kilometres in Jammu and Kashmir, Andhra Pradesh and Maharashtra during 1969-70 will

be completed according to schedule. The programme will be extended during 1970-71 to cover further forest areas. A special study is to be undertaken during 1970-71 of the forest resources of the North West Himalayan region. The report of the expert committee appointed by the Ministry of Food, Agriculture, Community Development and Cooperation in October, 1969 to suggest, in the light of national and international experience a policy for national parks and sanctuaries, improvements in the administration of existing national parks and sanctuaries and to lay down guidelines for the creation of new ones, will be available during the year.

Mineral Resources

14.35. Geological Survey of India, Indian Bureau of Mines, Department of Atomic Energy, Oil and Natural Gas Commission and State Directorates of Geology and Mining will continue work on mineral exploration and investigation in their respective fields. The programme of the Geological Survey for 1970-71 is envisaged to cover about 52,000 sq. km. by systematic mapping, about 12,440 sq. km. by large scale mapping for mineral exploration drilling to the extent of about 165,500 metres and exploratory mining to the extent of about 7,900 metres. The exploration for sulphide mineral in Andhra Pradesh, Bihar and Rajasthan and phosphorite in Uttar Pradesh and Rajasthan will continue to receive high priority. It is expected to undertake 122 groundwater, 116 engineering geology and 76 geophysical investigations.

14.36. In addition to the work of publication of mineral statistics and information and regulatory inspection of mines, the Indian Bureau of Mines has planned to undertake detailed study of 50 mines, conduct regional appraisal for 7 mineral areas, undertake research in specific mineral problems and carry out 30 beneficiation investigations. The pilot plant test of phosphorite and the agglomeration test on iron ore fines will be carried out. The Department expects to extend its consultancy service to 27 units during 1970-71.

14.37. The Oil and Natural Gas Commission would continue their search for oil through geological and geo-physical exploration in the known as well as some new fields. Off-shore drilling in the continental shelf of the Gulf of Cambay, started at the end of 1969-70, will be continued. The total area proposed to be drilled during 1970-71 is 268,000 metres against 213,000 metres during the previous year.

Groundwater Resources

14.38. The programme of the Geological Survey of India for 1970-71 includes 122 groundwater investigations and 16

investigations of detailed groundwater assessment by deploying six additional rigs. With the existing five Failing and five URBS drills, groundwater explorations being carried out at Haldia (in connection with the establishment of a refinery at Durgapur for the Durgapur industrial complex), Delhi, Pondicherry and in some parts of drought affected areas in Andhra Pradesh and Rajasthan would continue during the year. With the additional drills to be procured during 1970-71, drilling is intended to be undertaken in Tripura.

Energy Development

14.39. The Sixth Annual Power Survey, which was undertaken to reassess and bring up to date the demand for electricity over the Fourth Plan period in different regions as well as on an All-India basis is expected to be completed during the first half of 1970-71. Following this, the 7th Annual Power Survey will be initiated during the latter half of the year to extend the demand forecast for power covering the Fifth Plan period on the basis of All-India as well as the five pov er regions (North, South, West, East and North-East). The manufacturing programme of heavy electrical equipment to sustain the required power development during the Fifth Plan will be examined with a view to achieving proper phasing and co-ordination.

14.40. Among the important studies which are expected to be completed, continued or initiated during 1970-71 may be mentioned.

(1) Comparative economics of railway traction using coal diesel oil or electricity ;

(2) Review of forecast of demand for petroleum products by the Oil Advisory Committee and examination of the programme of establishing oil refineries in the light of this review ;

(3) Techno-economic study on the feasibility of hydrogenation of coal to obtain crude petroleum and its products by the Central Fuel Research Institute ;

(4) Preliminary studies on generation of atomic energy at different probable sites and development of agro-industrial complexes based on them.

CHAPTER 15

HEALTH AND FAMILY PLANNING

I. HEALTH

AN outlay of Rs. 63.45 crores has been provided for health programmes for 1970-71 as against the outlay of Rs. 55.31 crores during 1969-70. The distribution of the outlay as between Centre, States and Union Territories is given below:—

TABLE 15.1: *Outlay on health programmes by Centre, States and Union Territories*

(Rs. crores)

sl. no.		1969-70	1970-71
(0)	(1)	(2)	(3)
1.	centre	6.36	7.41
2.	centrally sponsored	22.77	25.37
3.	states	23.58	27.19
4.	union territories	2.60	3.48
	total	55.31	63.45

15.2. The programme-wise distribution of the outlay is as follows:

TABLE 15.2: *Distribution of outlay*

(Rs. crores)

sl. no.	programme	1969-70 Plan outlay	1970-71 Plan outlay
(0)	(1)	(2)	(3)
1.	medical education and research	11.66	14.65
2.	training programmes	1.44	1.60
3.	control of communicable diseases	19.25	20.15
4.	hospitals & dispensaries	9.31	12.50
5.	indigenous systems of medicine	1.97	2.50
6.	primary health centres	8.15	7.30
7.	other programmes	3.53	4.75
	total	55.31	63.45

Control of Communicable Diseases

15.3. An outlay of Rs. 14.69 crores has been allocated for the national malaria eradication programme. The corresponding outlay for 1969-70 was Rs. 14.50 crores. Under the national small pox eradication programme, emphasis will continue to be placed on primary vaccination of the new born, clearance of the back log in primary vaccination and re-vaccination of selected groups of population. It is expected that 44 million primary vaccinations and 110 million re-vaccinations will be done during the year as against 22.52 million primary vaccinations and 52.6 million re-vaccinations done during 1969-70. Steps have been taken to augment the strength of the vaccinators and the supervisory staff adequately.

15.4. The national T.B. control programme provides for the free supply of anti-T.B. drugs to voluntary agencies and to new T.B. clinics to be set up during the Fourth Plan. During 1970-71 40 T.B. clinics are to be set up. Free drugs will also be provided for expansion of State T.B. clinics. The production capacity of freeze dried BCG vaccine of BCG laboratory, Guindy will be increased.

15.5. Twenty-seven filaria control units are to be set up during 1970-71. Besides, free supply of material and equipment will continue to be given to the existing 68 filaria control units which are undergoing re-organisation according to the revised staffing pattern. The Central Survey Team which has been set up will carry out filaria survey in different parts of Rajasthan and the field evaluation work on regional basis will be undertaken by the Filariasis Training Centres at Calicut, Rajahmundry and Varanasi in addition to their normal training programme.

15.6. Under the leprosy control programme, 10 leprosy control units and 30 survey, education and treatment (SET) centres are to be established during 1970-71. Eight subsidiary centres will be upgraded into leprosy control units on the revised pattern. Medical officers and non-medical personnel will continue to receive training at the Central Leprosy Teaching and Research Institute, Chingleput, Tamil Nadu.

15.7. The trachoma control programme envisages a coverage of 118 C.D. Blocks during 1970-71. Anti-biotic ophthalmic ointment will continue to be distributed in the rural areas through primary health centres. For control of venereal diseases, control programme, 10 additional clinics will be set up which will be

the total number of VD clinics to 280 by 1970-71. To control cholera which is endemic in 54 districts, it is proposed to establish 7 mobile medical units, one each in State of Andhra Pradesh, Bihar, Maharashtra, Orissa, Mysore, Tamil Nadu and West Bengal, and the appointment of special cholera workers in selected endemic blocks of the affected districts will be under implementation.

Education, Training and Research

15.8. By 1969-70 there were 95 medical colleges in the country with annual admissions of about 11,800. During 1970-71 one more medical college will be established and the annual admission capacity is expected to increase to 11,850. Funds have been provided in the State Plans for provision of buildings, equipment and augmentation of facilities in the existing medical colleges. The existing post-graduate training and research institutes at Chandigarh, Pondicherry, Delhi and Calcutta will be strengthened with equipment and other facilities. Assistance will be given to the States to establish 17, including two dental, post-graduate departments to meet the growing demand for teachers and specialists in the medical colleges and hospitals. A provision of Rs. 1.75 crores has been made for the Indian Council of Medical Research as against Rs. 1.25 crores in the preceding year. Under the Centrally sponsored scheme training of physiotherapists, occupational therapists and prosthetic technicians, it is proposed to grant stipends to 120 candidates.

15.9 In 1970-71, 5,000 additional beds are likely to be added. This would raise their number in Government hospitals to 2,66,200 by 1970-71. Ten psychiatric clinics in the district and teaching hospitals are likely to be established. The Central Government Health Service Scheme is being extended to Calcutta. Besides, three more dispensaries are being opened in Bombay, and one in Allahabad.

Primary health centres

15.10. By 1969-70, 5,015 primary health centres had been established, which included about 196 second primary health centres in 196 Blocks. During 1970-71, 168 more primary health centres are expected to be set up. Under the Centrally sponsored sector a provision of Rs. 4 crores has been made for basic health services in 2,870 primary health centres situated in malaria maintenance phase areas.

Indigenous systems of medicine

15.11. During 1969-70 the Government constituted an autonomous Central Council for Research in Indian Medicine and homoeopathy to initiate, guide and co-ordinate scientific research in different aspects, fundamental and applied, of Ayurveda, Siddha, Unani and Homoeopathy systems of medicine and in Yoga. This Council will now directly administer the research projects under the indigenous systems of medicine. Four more survey units of medicinal plants will be established. Four post-graduate departments in Ayurveda at Lucknow, Patiala, Jaipur and Bombay will be upgraded during the year. The literary research units at Thanjavur, Aligarh and Varanasi and the post-graduate institutes at Jamnagar, Trivandrum and Varanasi will continue with their programmes.

Other programmes

15.12. Rs. 4.75 crores have been provided for other programmes. The Central Food Laboratory, Calcutta, which is an appellate Laboratory dealing with very large number of samples will receive additional equipment. It is proposed to organise training of food inspectors and public analysts at Central Food Laboratory Calcutta and drug analysts at the Gujarat State Laboratory, Baroda during the year. Against the anticipated 9 additional iodisation salt units proposed for 1969-70 under goitre control programme, only four could be established, two at Kharagoda and two at Sambar Lake. With these additional installations the present annual production of iodised salt is being increased from 65,000 to 75,000 tons.

15.13. Targets for some of the important health programmes for 1970-71, along with the position at the end of 1969-70 are given below:

TABLE 15.3: *Selected achievements and targets*

s. no.	item	estimated position by 1969-70	target for 1970-71
(0)	(1)	(2)	(3)
1.	beds	261200	266200
2.	primary health centres	5015	5185
3.	medical colleges	95	9

(1)	(2)	(3)
4. annual admission in medical colleges	11800	11850
5. dental colleges	15	15
6. annual admissions in dental colleges	636	636
national malaria eradication programme		
7. attack phase (units)	107.464	97.000
8. consolidation phase (units)	68.740	71.000
9. maintenance phase (units)	217.046	225.250
total	393.250	393.250
10. T.B. clinics	508	548

II. Family Planning

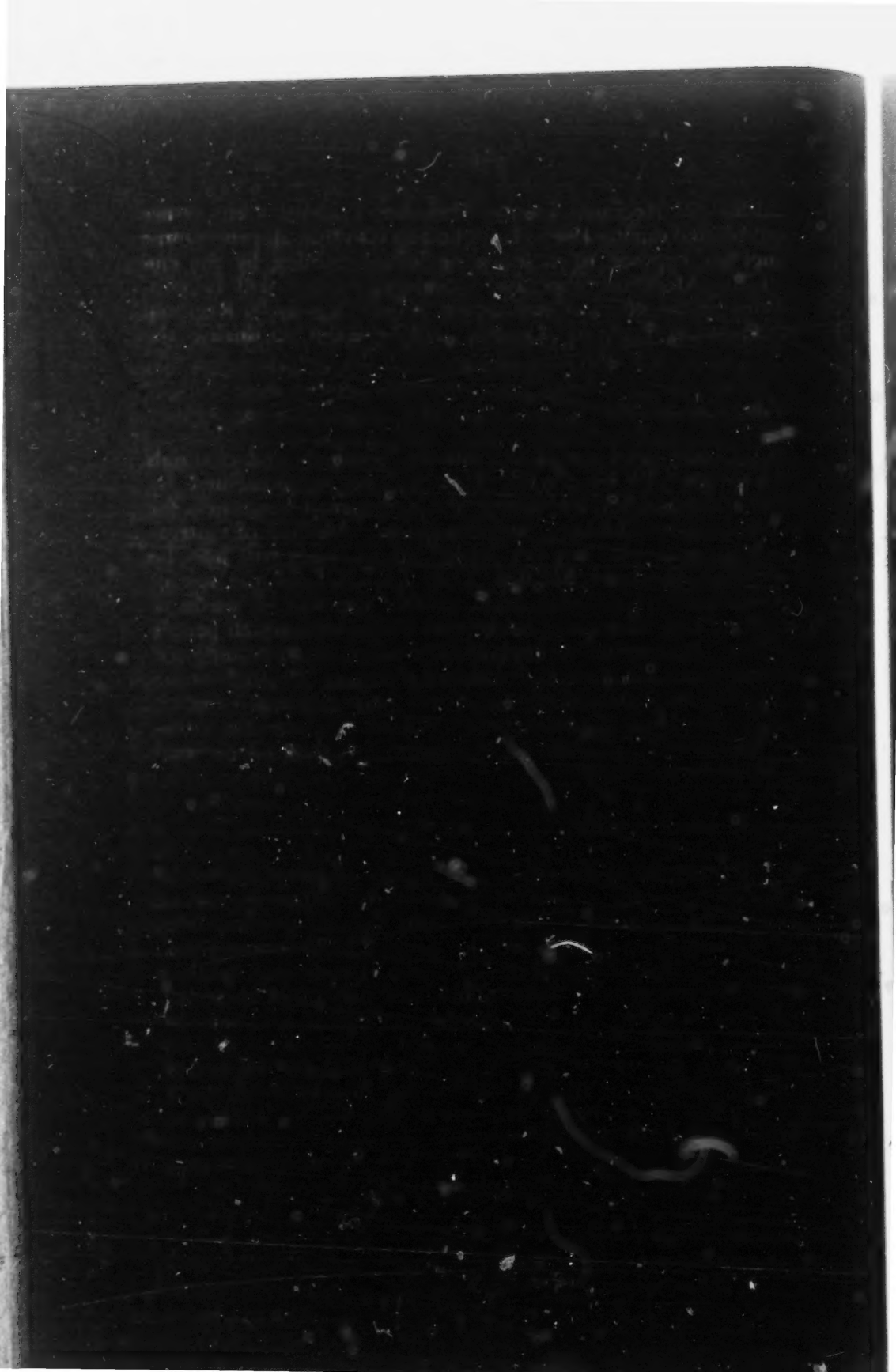
15.14. Family Planning programme will be considerably expanded to achieve the ultimate objective set out in the Fourth Plan in terms of reduction of annual birth rate from 39 per thousand to 25 per thousand population within the next 10 to 12 years. A provision of Rs. 52.00 crores has been made for the programme during 1970-71, as against an outlay of Rs. 42 crores for 1969-70.

15.15. Of the proposed outlay, Rs. 46.19 crores will be allocated to the States and Union Territories and the remaining Rs. 5.81 crores will be spent directly by the Centre. Table 5.4 gives the distribution of the outlay by various programmes:—

Table 5.4: *Outlay on Family Planning Programme*

(Rs. lakhs)

sl. no.	programme	Centrally sponsored		centre	total
		(state)	(union territories)		
(0)	(1)	(2)	(3)	(4)	(5)
1.	service	4102.74	58.00	206.83	4367.57
2.	training	171.15	2.00	48.41	221.56
3.	mass education	150.00	4.00	136.88	290.88
4.	research	3.50	..	141.06	144.56
5.	organisation	70.00	4.71	48.11	122.82
6.	maternal and child health	52.61	..	..	52.61
	total	4550.00	68.71	581.29	5000.00



CHAPTER 16

URBAN DEVELOPMENT, HOUSING AND WATER SUPPLY

I. Urban Development and Housing

A provision of Rs. 42.49 crores has been made for 1970-71 for urban development and housing. Sector-wise distribution between Centre, States and Union Territories is indicated below along with the corresponding figures for year 1969-70.

Table 16.1: *Plan outlay on urban development and housing for* 1969-70 *and* 1970-71.

(Rs. crores)

sl. no.		1969-70			1970-71		
		urban dev.	housing	total	urban dev.	housing	total
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	centre	0.16	6.53	6.69	0.16	9.34	9.50
2.	states	7.65	6.77	14.42	10.02[1]	19.01[1]	29.03
3.	union territories	0.06	2.99	3.05	2.00[1]	1.96[1]	3.96
	total	**7.87**	**16.29**	**24.16**	**12.18**	**30.31**	**42.49**

[1]Provision for Urban Development in some States included under Housing—see Annexure 16.1.

16.2. The State-wise allocations under housing and urban development are given in Annexure 16.1. In a few States, because of the interlinked scope of housing and urban development schemes, outlay on urban development has been shown under housing. The provisions under housing are also inclusive of a sum of Rs. 14 crores of LIC loans to the States. LIC funds will be utilised for financing housing schemes like low-income group housing, middle income group housing, rental housing and land acquisition and development schemes. States' resources will be utilised for other schemes involving subsidy and loan, like industrial housing, slum clearance and village housing. The village housing projects scheme will continue to be implemented during the year. The scheme broadly provides for loans to villagers for the construction or improvement of houses. Grants are also given to villages for

provision of house sites to landless agricultural workers, and for provision of streets and drains. State Governments are expected to allocate a sum of about Rs. 1 crore for this scheme in 1970-71.

16.3. Out of the provision of Rs. 9.34 crores made for housing schemes in the Central sector, Rs. 2 crores will be utilised towards the share capital for the Housing and Urban Development Finance Corporation which has been registered as a Company under the Indian Companies Act. The Corporation would establish a revolving fund through borrowings from financial institutions, like LIC and banks, for financing housing and urban development projects, thereby supplementing the provisions in the Plan. A provision of Rs. 6.53 crores for office and residential accommodation for Central Covernment employees has been made mainly for continuing works in Delhi, Bombay, Calcutta, Madras, Nagpur and Chandigarh. A provision of Rs. 25 lakhs has been made under dock labour housing scheme for the completion of the houses under construction at Visakhapatnam, Calcutta, Madras and Cochin and taking up fresh construction at Marmugao, Bombay, Cochin and Madras Ports. Grants would be continued to C.P.W.D. and semi-Grovernment organisations for undertaking experimental construction to evolve cheaper methods and materials. The collection of housing statistics is being undertaken by the Registrar General (Housing Census and House listing), the National Sample Survey and the National Buildings Organisations. A provision of Rs. 40 lakhs has been made for the balance of the loan to be given to the Tamil Nadu Government for the Cellular Concrete plant at Ennore. This is a continuing scheme for which a loan of Rs. 2 crores was given last year to the State Government.

16.4. The provisions under urban development for the States and Union Territories cover such programmes as preparation of master plans, financial assistance to local bodies and housing boards for the implementation of land acquisition and other urban development schemes generally of a remunerative nature. In addition, provisions for urban development will be supplemented by provisions included in the respective sectors of development such as water supply, sewerage, road and transport development specially in metropolitan cities. In the West Bengal Plan, the provision of Rs. 6.77 crores for Calcutta has in fact been on integrated basis covering schemes of water supply, drainage, roads and road transport, housing, Basti improvement and other development schemes.

16.5. Under the Central Sector provision for urban development, Rs. 9 lakhs are for the preparation or inter-state regional and area plans, and Rs. 6.6 lakhs for local self government training and research. The work on the preparation of inter-state regional plans for the South East Resource region and the National Capital region would be continued. The programme of training of municipal employees is being implemented through the five L.S.G. training centres located at Delhi, Bombay, Lucknow, Hyderabad and Calcutta.

II. Water Supply and Sanitation

16.6. An outlay of Rs. 63.50 crores has been provided in the Annual Plan for water supply and sanitation programmes. Distribution of outlay as between the Centre, States and Union Territories is given in following table:

Table 16.2: *Outlay on Water Supply and Sanitation*

(Rs. lakhs)

sl. no.		1969-70	1970-71
(0)	(1)	(2)	(3)
1.	states	4052	5598[1]
2.	union territories	479	709
3.	centrally sponsored schemes	37	40
4.	centre	5	3
	total	4573	6350

[1]This includes LIC loans expected to be raised by the states and local authorities for water supply and sewerage schemes.

Urban Water Supply and Sanitation

16.7. Out of the provision of Rs. 63.07 crores in the States and Union Territories, urban water supply and sanitation accounts for Rs. 41.56 crores; the break up for States and Union Territories is shown in the Annexure 16.2. The work on continuing schemes is to be accelerated to ensure early completion. Several new urban water suply schemes are also to be undertaken. Some of the major schemes proposed to be covered during 1970-71 are: Bhatsai Project for Bombay water supply, water supply and sewage project of Bangalore, water supply and sewerage schemes for the Calcutta Metropolitan District, Veeranam project to augment supply to Madras City, Dhauj and Kot project or alternative

schemes for augmentation of water supply to Delhi, Manjira project for Hyderabad water supply, Getalsud scheme for Ranchi, Cochin Development Area water supply and Sewerage scheme, Opa project for water supply to towns in Goa and Dhanikari project for Port Blair.

Rural Water Supply and Sanitation

16.8. From 1969-70, the provisions for rural water supply are earmarked in the Plans of States and Union Territories. Against an outlay of Rs. 13.10 crores for 1969-70, a provision of Rs. 21.51 crores has been made for 1970-71. Rural water supply programmes, in addition to schemes of piped water supply, will cover construction of wells. This will be in addition to provisions for such programmes under welfare of backward classes.

16.9. In the Central Sector (including Centrally sponsored schemes) out of a total provision of Rs. 43.15 lakhs, Rs. 40 lakhs have been provided to assist the Special Investigation Divisions in the State Public Health Engineering Departments for exploring and formulating rural water supply schemes and assessment and identification of the scarcity hit and difficult areas. The funds will be supplemented by the provision of high speed drilling rigs to be made available by UNICEF. Training programmes, such as (a) post-graduate training in public health engineering at Calcutta, Bombay and Roorkee and (b) under-graduate training organised from time to time in different States by the Central Public Health Engineering Organisation of the Ministry of Health, Government of India will be continued. The under-graduate courses include training of water works supervisors, well drillers, water and sewage analysts and sewage and industrial plants supervisors.

16.10. Necessary legislation for the establishment of Water Pollution prevention boards at the Central and State levels is under consideration of the Ministry of Health. A provision of Rs. 0.50 lakh has been made for the establishment of the Central Board during the year.

ANNEXURE 16.1

Outlays for 1970-71—*Housing and Urban Development in the States and Union Territories*

(Rs. lakhs)

sl. no.	state/union territory	housing		urban dev.	
		1969-70 outlay	1970-71 outlay	1969-70 outlay	1970-71 outlay
states					
1.	Andhra Pradesh	30	80	20	[1]
2.	Assam	15	21	40	48
3.	Bihar	15	124	10	15
4.	Gujarat	50	101	10	8
5.	Haryana	1	55	..	[1]
6.	Jammu and Kashmir	38	60	[1]	16
7.	Kerala	30	83	[1]	25
8.	Madhya Pradesh	37	130	7	10
9.	Maharashtra	90	290	20	150
10.	Mysore	50	100	25	[1]
11.	Nagaland	10	10	10	15
12.	Orissa	10	87	18	7
13.	Punjab	12	100	8	[1]
14.	Rajasthan	12	97	6	[1]
15.	Tamil Nadu	125	250	80	29
16.	Uttar Pradesh	60	210	[1]	[1]
17.	West Bengal	92	103	511	679
	Total —States	**677**	**1901**	**765**	**1002**
union territories					
18.	Andaman and Nicobar Islands	0.47	2.50	[1]	..
19.	Chandigarh	5.00	5.50	[1]	..
20.	Delhi	260.00	140.09	[1]	181.00
21.	Dadra and Nagar Haveli	1.00	2.00	..	..
22.	Goa	4.80	12.26	0.87	3.44
23.	Himachal Pradesh	10.00	10.00	3.00	10.00
24.	Laccadive Minicoy and Amindivi	0.30	0.05	..	..
25.	Manipur	3.00	3.50	[1]	2.30
26.	NEFA	..	..	..	..
27.	Pondicherry	10.00	16.85	[1]	[1]
28.	Tripura	4.00	3.25	1.50	3.25
	Total —union territories	**298.57**	**196.00**	**5.37**	**199.99**
	grand total	**975.57**	**2096.50**	**770.37**	**1201.99**

[1]Included under 'Housing'.

ANNEXURE 16.2

Plan outlays on Water Supply in 1970-71 in the States and Union Territories

(Rs. lakhs)

s.no.	state/union territory	1969-70 outlay			1970-71 outlay		
		urban water supply	rural water supply	total water supply	urban water supply	rural water supply	total water supply
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andhra Pradesh	145.00	95.00	240.00	57.00	161.00	218.00
2.	Assam	37.00	60.00	97.00	95.96	39.04	135.00
3.	Bihar	441.00	30.00	471.00	235.00	62.00	297.00
4.	Gujarat	105.00	115.00	220.00	130.00	161.00	300.00
5.	Haryana	20.00	30.00	50.00	45.00	95.00	140.00
6.	Jammu and Kashmir	35.00	40.00	75.00	56.00	89.00	145.00
7.	Kerala	67.00	23.00	90.00	110.00	50.00	160.00
8.	Madhya Pradesh	151.00	76.00	227.00	189.00	161.00	350.00
9.	Maharashtra	851.00	249.00	1100.00	1050.00	300.00	1350.00
10.	Mysore	193.00	57.00	250.00	300.00	200.00	500.00
11.	Nagaland	37.00	11.00	48.00	36.12	21.58	58.00
12.	Orissa	73.00	7.00	80.00	46.00	46.00	92.00
13.	Punjab	33.00	27.00	60.00	40.00	105.00	145.00
14.	Rajasthan	92.00	118.00	210.00	224.00	200.00	424.00
15.	Uttar Pradesh	162.00	138.00	300.00	254.00	152.00	406.00
16.	West Bengal	34.00	50.00	84.00	95.13	44.00	139.13
17.	Tamil Nadu	340.00	110.00	450.00	564.00	175.00	739.00
	Total—States	**2816.00**	**1236.00**	**4052.00**	**3536.51**	**2061.62**	**5598.13**
1.	Andaman and Nicobar Islands	9.20	2.00	11.20	80.00	2.00	82.00
2.	Chandigarh	..	0.50	0.50	..	2.10	2.10
3.	Delhi	292.00	8.00	300.00	400.00	15.00	415.00
4.	Dadra and Nagar Haveli	..	2.00	2.00	..	2.00	2.00
5.	Goa	66.00	4.00	70.00	100.00	5.00	105.00
6.	Himachal Pradesh	..	50.00	50.00	..	50.00	50.00
7.	Laccadive Minicoy and Amindivi	..	..	..	—	—	—
8.	Manipur	4.00	3.00	7.00	6.55	4.45	11.00
9.	NEFA	6.00	3.00	9.00	3.00	3.00	6.00
10.	Pondicherry	19.00	1.00	20.00	26.90	3.00	29.90
11.	Tripura	9.50	..	9.50	3.50	2.50	6.00
	Union Territories	**405.70**	**73.50**	**479.20**	**619.95**	**89.05**	**709.00**
	Grand total	**3221.70**	**1309.50**	**4531.20**	**4156.46**	**2150.67**	**6307.13**

CHAPTER 17

SOCIAL WELFARE

THE Annual Plan 1970-71 provides for an outlay of Rs. 5.43 crores for Social Welfare programmes. The sector-wise distribution, together with the Plan outlay for the year 1969-70, is as follows:

TABLE 17.1. *Outlay on Social Welfare*

sl.no.		1969-70 Plan outlay	1970-71 Plan outlay
(0)	(1)	(2)	(3)
1.	centre	2.82	3.44
2.	centrally sponsored	0.38	0.41
3.	states	1.10	1.36
4.	union territories	0.14	0.22
	total	4·44	5·43

The state-wise break-up of outlay is given in Annexure 17.1.

17.2. The programme of providing integrated services to women and children in rural areas through family and child welfare projects will be improved and expanded, taking into consideration the recommendations of the evaluation committee set up by the Department of Social Welfare. Provision has therefore been made for the continuation of existing 175 project and setting up of additional 50 new projects in phases by conversion of the coordinated welfare extention projects. The phased programme would be carried out with the approval of the concerned State Governments so that the financial liability can devolve smoothly on the States at the end of the five year period. These projects which consists of one main centre and 5 sub-centres, known as Griha Kalyan Kendra and Bal Vikas Kendras, provide (a) services benefiting pre-school children and (b) basic training to women in home-craft, mother craft, health education, nutrition and child care. In the implementation of the projects, coordination with other services such as applied nutrition and primary health centres will be obtained. Further, stress will be laid on

the need for built-in-evaluation, effective supervision at different levels and training of personnel engaged in operating the programme.

17.3. The grant-in-aid programme of the Central Social Welfare Board will, as in the preceding year, give financial and technical assistance to over 3000 voluntary welfare agencies. Greater emphasis will be placed on the provision of services for destitute children either directly or through voluntary effort during 1970-71. Provision has been made to strengthen the existing organisations working for the welfare of destitute children and to initiate further institutional and non-institutional services for them. The major sponsored programmes of the Board to be continued during 1970-71 include condensed courses of education for adult women; socio-economic programme, holiday homes for children and urban welfare extension projects. Steps will be taken to provide field counselling services to voluntary welfare organisations to improve and expand their activities. The All India Prohibition Council will be assisted in their programmes relating to educational work on prohibition. The Central Institute of Research and Training in Public Cooperation will continue to conduct research and organise orientation courses for personnel drawn from voluntary and official organisations.

17.4. Nutrition deficiency in the pre-school children is recognised as a problem requiring urgent attention. A coordinated approach will be adopted to organise a nutrition programme for pre-school children in the age group 3 to 6 years and for expectant and nursing mothers. The coverage of child population for nutrition programmes in the social welfare sector will be about 60,000 children through the machinery of family and child welfare projects, women welfare organisations and other voluntary agencies.

17.5. The programme for the welfare of physically handicapped which includes, *inter-alia*, the services of integrated education for blind children, sheltered workshops, schools for partially deaf, training of teachers and developing national centres for handicapped persons, will be expanded. Emphasis will be laid on qualitative improvement in the existing services for the blind, the deaf, the orthopaedically handicapped and the mentally retarded persons. The programme of scholarship for the handicapped students for pursuing academic, technical and vocational courses has been enlarged to cover about 3000 beneficiaries as compared to 1896 at the end of 1969-70.

17.6. In respect of the social defence measures which cover revention and control of juvenile delinquency, eradication of eggary, social and moral hygiene programmes, welfare services prisons, aftercare and probation services, the accent will be n their effective implementation by the State Governments. he Central Bureau of Correctional Services will also provide echnical assistance in all matters relating to social defence both o the governmental and non-governmental agencies. It would rganise training courses, conduct studies and bring out journals nd publications.

17.7. For the rehabilitation of displaced families from East akistan staying in homes and infirmaries or receiving doles outide the institutions, a provision of Rs. 11 lakhs has again been nade. As in the preceding year, loans will be provided to families n which children have attained the age of 18 years or in which able bodied women have received some vocational training to enable them to either buy a plot of land, construct a small house r set-up business.

17.8. The programme of pre-vocational training, meant for children who cannot continue their school education due to economic or social reasons, will be continued on an experimental basis. Following the recommendation of the Study Team on Pre-vocational Training Centres, steps have been taken for the improvement of the existing 64 pre-vocational training centres in order to make them more effective. An additional 10 centres for conducting full-time and part-time courses in home crafts for girls and agricultural trades for boys are to be set up during the year.

ANNEXURE 17.1

Social Welfare

Outlay on Social Welfare by States—1970-71

(Rs. lakhs)

s.no.	state	1969-71	1970-71
(0)	(1)	(2)	(3)
1.	Andhra Pradesh	5·00	2·00
2.	Assam	7·00	12·00
3.	Bihar	1·00	1·00
4.	Gujarat	5·00	8·00
5.	Hariyana	3·00	5·00
6.	Jammu & Kashmir	4·00	5·00
7.	Kerala	4·00	3·00
8.	Madhya Pradesh	8·00	8·00
9.	Maharashtra	10·00	15·00
10.	Mysore	10·00	10·00
11.	Nagaland	2·00	3·00
12.	Orissa	3·00	4·00
13.	Panjab	5·00	6·00
14.	Rajasthan	2·00	5·00
15.	Tamil Nadu	16·00	16·00
16.	Uttar Pradesh	10·00	12·00
17.	West Bengal	15·00	21·00
	total	**110·00**	**136·00**

CHAPTER 18

WELFARE OF BACKWARD CLASSES

An outlay of Rs. 21.64 crores has been provided for the development and welfare of backward classes during 1970-71 as against the outlay of Rs. 19.25 crores during 1969-70. The following table gives the distribution of outlay between Centre, States and Union Territories :

TABLE 18.1 *Outlay on Welfare of Backward Classes*

(Rs. crores)

S.no.	1969-70 Plan outlay	1970-71 Plan outlay
(0)	(1)	(2)
1. centrally sponsored	10.76	9.91
2. states	7.90	10.87
3. union territories	0.59	0.86
total	**19.25**	**21.64**

18.2. Out of the provision made for Centrally sponsored programmes in 1970-71, the most important scheme to be continued from earlier years is that of tribal development blocks for which an outlay of Rs. 5.28 crores has been made. According to the approved pattern of the scheme, no new blocks are to be started in the Fourth Plan. Existing blocks will move on to the next stage on completion of their phased programme. In 1969-70, 171 blocks were on Stage I, 275 blocks on State II and 43 blocks on Stage III. As against this, during 1970-71, 31 Blocks will be on Stage I, 415 Blocks on Stage II and 43 Blocks on Stage III.

18.3. Under the programme for post-matric scholarships about 1,75,000 scholarships will be awarded in 1970-71 to Scheduled Caste and Scheduled Tribe and other Backward Classes. Pre-examination training programme for Scheduled Caste and Scheduled Tribe candidates for various categories of posts in the Central and State services, other than I.A.S., will be continued at the pre-examination training centres in 14 States. The scheme for rendering guidance and special coaching to Scheduled Caste and Scheduled Tribe candidates for all-India and other competitive

examinations, started in three regional centres, will also be continued. Four additional coaching-*cum*-guidance centres will be established at Delhi, Kanpur, Jabalpur and Madras Employment Exchanges to give career planning guidance and pre-employment coaching for public services for candidates belonging to these classes.

18.4. A Study Team on Tribal Research Institute has been constituted by the Planning Commission to examine, among others, matters the need for setting up a Central Institute of Tribal Research and Training.

18.5. In the State sector, schemes of educational development up to matric stage, economic uplift and improvement in health and housing will continue to be implemented. State Governments have however been advised to integrate individual schemes in the backward classes sector with general sector programmes, keeping in view the special needs of an area and category of backward classes so that the effort will be of a magnitude which produces the required impact. Detailed guidelines have been formulated in this respect. Plan outlays for States and Union Territories for 1969-70 and 1970-71 are given in Annexure 13.1.

ANNEXURE 18.1

Outlays for 1969-70 *and* 1970-71

(Rs. lakhs)

.no.	state/union territory	1969-70	1970-71
0)	(1)	(2)	(3)
tate			
1.	Andhra Pradesh	50	45
2.	Assam	82	95
3.	Bihar	70	78
4.	Gujarat	45	75
5.	Haryana	20	31
6.	Jammu and Kashmir	8	10
7.	Kerala	20	20
8.	Madhya Pradesh	105	200
9.	Maharashtra	40	54
10.	Mysore	60	68
11.	Nagaland	..	..
12.	Orissa	50	75
13.	Punjab	25	30
14.	Rajasthan	15	52
15.	Tamil Nadu	80	125
16.	Uttar Pradesh	62	72
17.	West Bengal	58	57
	total	**790**	**1087**
union territory			
1.	Andaman and Nicobar	1.75	1.34
2.	Chandigarh	..	..
3.	Dadra and Nagar Haveli	..	..
4.	Delhi	7.00	25.00
5.	Goa, Daman and Diu	2.55	3.05
6.	Himachal Pradesh	8.00	8.00
7.	Laccadive and Minicoy	..	0.25
8.	Manipur	10.00	8.70
9.	Pondicherry	4.50	5.35
10.	Tripura	25.31	34.35
	total	**59.11**	**86.04**

CHAPTER 19

LABOUR AND EMPLOYMENT

PLAN outlay of Rs. 6.90 crores has been provided for Labour Welfare and Craftsmen Training programme during 1970-71 as against the outlay of Rs. 6.34 crores in 1969-70. The break up of the outlay between Centre, States and Union Territories is as under:

(Rs. crores)

	1969-70 Plan outlay	1970-71 Plan outlay
Centre	1.70	1.73
Centrally sponsored	..	..
States[1]	4.28	4.71
Union territories[1]	0.36	0.46
Total	6.34	6.90

[1]Statewise break up is given in Annexure 19.1.

19.2. Under the craftsmen training programme, which is administered by the State Governments, no addition to seating capacity is envisaged during the year. Emphasis will be placed on the consolidation of existing capacity by making up the deficiency in the availability of machinery, equipment and buildings and improving the quality of training through provision of suitably training instructors. Diversification programme in respect of the seating capacity in the Industrial Training Institutes will be continued by reducing the seating capacity in the less popular trades and introducing seats in selected new trades to keep pace with the modern technological requirements. Further, in-plant training facilities will be provided in some of the trades for apprentices under the Apprenticeship programme. The Apprenticeship Act, 1961 is proposed to be extended to cover the engineering degree and diploma holders. Efforts will be made to extend the apprenticeship programme to cover the catering and other industries such as chemical and printing. The construction of the building and the creation of machinery and equipment in the Central Staff Training and Research Institute at Calcutta, and the Foremen Training Institute at Bangalore are scheduled for completion in 1970-71. The training programmes at these Institutes as also at the Advanced Training Institute, Madras, are expected to commence during the year.

Labour Welfare

19.3. The National Commission on Labour has made a number of recommendations relating to labour policy particularly on industrial relations, labour welfare and social security. The recommendations are under examination. The Chief Labour Commissioner's office will be strengthened for dealing more effectively with industrial disputes, better enforcement of labour legislation, particularly the Minimum Wages Act and the Industrial Disputes Act. Studies and research in labour relations and allied subjects would be promoted. The Workers' Education programme will be extended. The Labour Bureau has initiated a comprehensive family budget enquiry for facilitating the compilation of a revised series of the consumer price index numbers with 1970-71 as the base. The field work relating to this study will be conducted during the year. The intensive type studies on rural labour, on which work is currently in progress in the Labour Bureau, is also expected to be completed during the year.

19.4. In the field of social security, the Committee on Labour Welfare and also the National Commission on Labour have made recommendations which are under the consideration of Government. It is likely that action would be initiated on some of these recommendations during the year. The Employees' State Insurance Scheme will be extended to cover more areas and certain non-factory sectors. Some State Governments have made provision in their plans for strengthening the industrial relations system and the inspection machinery to secure better implementation of labour laws and labour welfare measures.

ANNEXURE 19.1

Outlay on Labour and Labour Welfare in 1970-71 by States and Union Territories

(Rs. lakhs)

states	1970-71 (approved outlay)
Andhra Pradesh	10.00
Assam	20.00
Bihar	43.00
Gujarat	27.00
Haryana	17.00
Jammu and Kashmir	6.00
Kerala	39.00
Madhya Pradesh	21.00
Maharashtra	33.00
Mysore	34.06[1]
Nagaland	..
Orissa	13.00
Punjab	24.00
Rajasthan	8.00
Tamil Nadu	21.00
Uttar Pradesh	114.00
West Bengal	41.00
total (states)	**471.00**
union territorie	
Andaman and Nicobar Islands	0.40
Chandigarh	3.35
Delhi	25.05
Goa, Daman and Diu	4.00
Himachal Pradesh	8.00
Manipur	0.50
N.E.F.A	2.50
Pondicherry	1.60
Tripura	0.66
Total (Union Territories)	**46.06**
Grand Total	**517.06**

[1]Tentative

CHAPTER 20

OTHER PROGRAMMES

I. Rehabilitation

A provision of Rs. 12.54 crores has been made in the Annual Plan 1970-71 for the implementation of development programmes relating to the rehabilitation of migrants from East Pakistan, repatriates from Burma and Ceylon, and for the development programmes in the Dandakaranya Project and Andaman and Nicobar Islands.

20.2. By the end of 1969-70, about 40,000 families of new migrants from East Pakistan were settled in agricultural and non-agricultural occupations in different rehabilitation projects including Dandakaranya and Andaman and Nicobar Islands. In the Dandakaranya Project area, 13,420 families (agriculturists 12,672 and non-agriculturis 748) were settled by March, 1970. It is proposed to re-settle additional 1400 families from East Pakistan in the project area in 1970-71. Besides 2100 new migrants, agriculturists families from East Pakistan will also be resettled in agricultural occupations in different States. About 1500 non-agricultural families are also proposed to be resettled in different States in small trade, business and similar occupations. A provision of Rs. 1.75 crores has been made for providing assistance to old migrants from East Pakistan in West Bengal and the migrants to India from Indian enclave proposed to be transferred to Pakistan.

20.3. Rehabilitation Industries Corporation, which provided employment to about 4700 persons in various industries set up by it by March 1970, will intensify activities to increase employment potential to the maximum extent possible.

20.4. Out of 51,000 families of Burmese repatriates arriving in India, about 42,550 families have been given rehabilitation assistance in the form of business loans and allotment of agricultural land and about 11,000 persons have been provided employment including casual employment. During 1970-71 rehabilitation assistance will be given to 1500 families already in India, in the form of business loan and allotment of agricultural land; in addition, provision has been made for giving assistance to 1500 families that may arrive in India during the year. As regards the repatriates from Ceylon about 5,000 families are proposed to be given

such rehabilitation assistance as may be required by them e.g. employment in plantations, business loans, housing loans and allotment of agriculture land.

20.5. The work on the special area development programme in Andaman and Nicobar Islands will be continued. It is proposed to send 155 families to these Islands in 1970-71 under various schemes in progress such as establishment of rubber-*cum*-development station, Katchal commercial rubber project, Neil island and Betapur Project, and settlement of ex-servicemen in Great Nicobar.

II. *Statistics*

20.6. An outlay of Rs. 135.80 lakhs has been provided for schemes under the purview of the Department of Statistics during 1970-71 as against the provision of Rs. 100 lakhs in 1969-70. The following table gives the break-up of the outlay between the Centre, States and Union Territories :

TABLE 20.1 : *Outlay on Statistics*

(Rs. lakhs)

sl. no.		1969-70	1970-71
(0)	(1)	(2)	(3)
1.	centre	53	72.87
2.	states and union territories	47	62.93
	Total	100	135.80

20.7. The outlay proposed for 1970-71 in the Central sector, comprises Rs. 21.87 lakhs for continuing schemes and Rs. 25 lakhs for grants-in-aid to the Indian Statistical Intitute. In addition, Rs. 22 lakhs have been provided for improvement of crop statistics under a scheme to be implemented by National Sample Survey. For new schemes Rs. 4 lakhs have been provided. New items of work such as studies of consumption expenditure and capital formation accounts of general Government, outputs and inputs of branches of production, provision of training in compilation of regional accounts for the State Government personnel and improvement of timeliness in the collection and processing of industrial statistics will be taken up.

20.8. In the States Sector, out of the total provision of about Rs. 63 lakhs for 1970-71, about Rs. 28 lakhs are expected to be for the core schemes and the balance of Rs. 35 lakhs for various statistical schemes of interest primarily to State Governments. The implementation of all statistical schemes, including the core schemes, is likely to be speeded up during 1970-71. State-wise allocation of the proposed outlay is given in Annexure 20.1.

20.9. In addition to the provisions stated above, an amount of Rs. 67.46 lakhs has been provided for the Office of the Registrar General for continuance of work on two Plan schemes namely (1) registration, promotion, methodological research and population studies under Vital Statistics (Rs. 54.12 lakhs), and augmentation of computer system for processing Census data (Rs. 13.34 lakhs).

III. Information Services and Plan Publicity

20.10. During 1969-70, one more Farm and Home unit was set up and this was linked with the Cuttack station of All India Radio. The programmes of these Farm and Home units include instructions to farmers for higher agricultural production. It is also proposed to give support to the Applied Nutrition Programme and schemes for the development of small scale industries through programmes broadcast by All India Radio. The Assamese, Bengali and Tamil editions of *Yojana* the fortnightly journal published on behalf of the Planning Commission, were brought out during 1969-70. This is in addition to the existing English and Hindi editions. The Directorate of Field Publicity arranged five "goodwill tours" to acquaint people from the isolated border areas with developmental activities, Plan progress and cultural heritage of the country.

20.11. The provision for schemes relating to information services and Plan publicity for 1970-71 is Rs. 1.99 crores. This includes Rs. 0.83 crore at the Centre, Rs. 0.83 crore for States and Rs. 0.33 crore for Union Territories.

20.12. During 1970-71, All India Radio proposes to establish Farm and Home units at eleven more stations, namely, Baroda, Calicut, Cuddapah, Dibrugarh, Gulbarga, Imphal, Jammu, Jeypore, Kurseong, Parbhani and Ranchi. Two more language editions of *Yojana* are proposed to be brought out. The Publication Division will start its scheme of publications for the student community. The direct mailing machinery of the Directorate of Advertising and Visual Publicity is to be strengthened. In the Directorate of Field Publicity, nine additional units will bring up the total

number during 1970-71 to 175. For servicing the smaller language newspapers with feature articles and official news the Press Information Bureau proposes to open branch offices in Agartala (Tripura), Imphal (Manipur) and Panaji (Goa). The Films Division will extend its coverage of developmental and other activities by having newsreel officers in three more States. Its Defence Films Wing will be started during 1970-71.

IV. Special and Backward Areas

20.13. An outlay of Rs. 535 lakhs has been provided during 1970-71 for the hill areas of Assam and Rs. 725 lakhs for Meghalaya. Emphasis has been laid on the development programmes relating to agriculture and allied sectors, roads and social services. For the hill and backward areas in Jammu and Kashmir, Rs. 115 lakhs are included in the State's Annual Plan. Out of this provision, an outlay of Rs. 85 lakhs is meant for the border district of Ladakh. The development plan of Uttar Pradesh includes a provision of Rs. 437 lakhs for Uttarkhand Division and Rs. 100 lakhs for the backward hill districts. Priorities are assigned to transport, communications and agricultural development. The Annual Plan of Tamil Nadu provides Rs. 45 lakhs for the chronically drought affected areas and for hilly areas. The schemes included for chronically drought affected areas relate to minor irrigation, soil conservation or electrification. In Gujarat, Rs. 225 lakhs has been allocated for the Selected District Level schemes including Rs. 150 lakhs for roads. An additional provision of Rs. 36.5[illegible] lakhs has been made for accelerated development of 26 economically backward talukas in the State.

V. Expansion of Printing Capacity

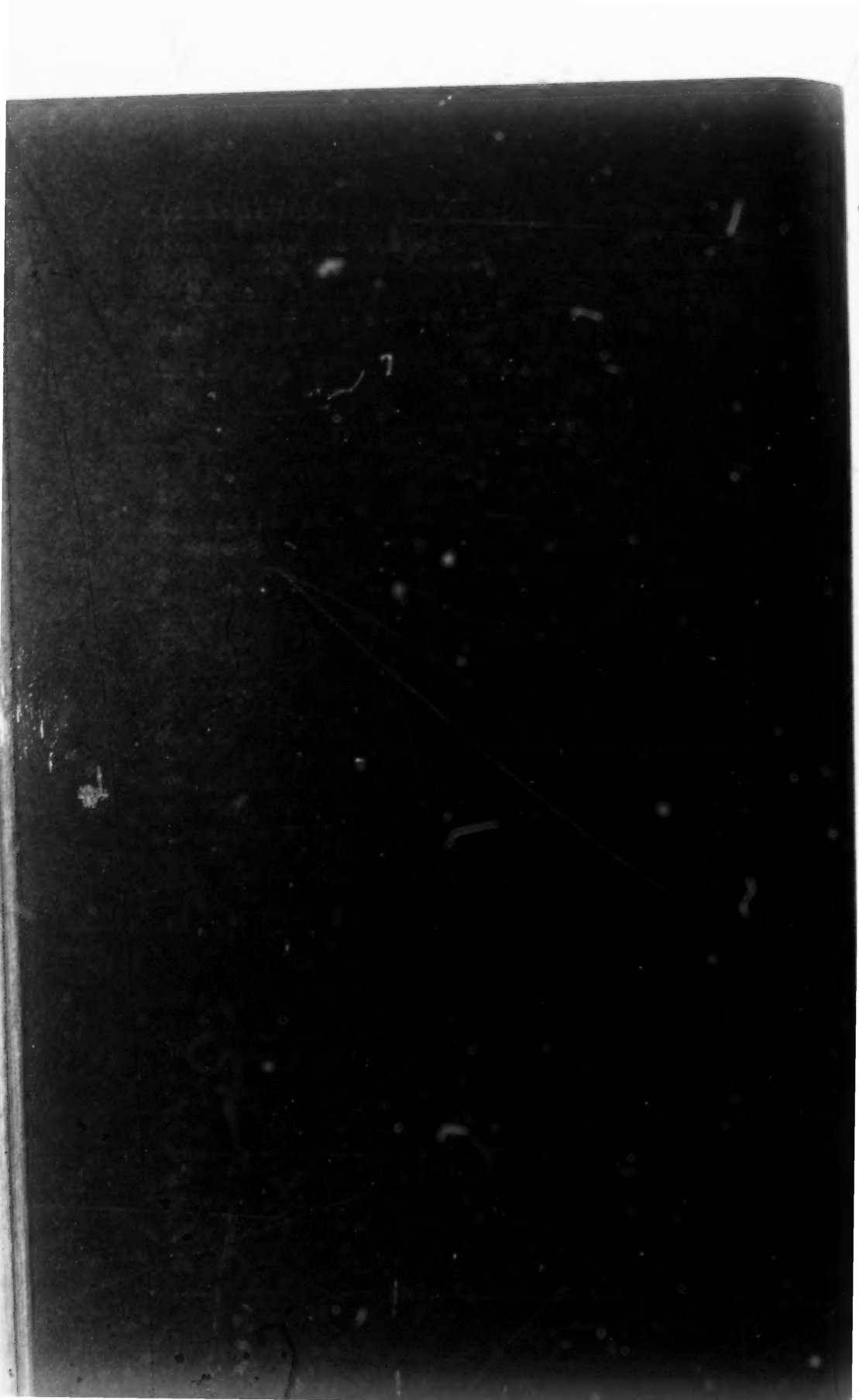
20.14. A provision of Rs. 124.3 lakhs has been provided fo[illegible] the programme relating to expansion of printing capacity. Wo[illegible] on the Government of India Presses at Koratty and Ring Roa[illegible] New Delhi will be continued. Other important schemes on whic[illegible] work will be continued include the schemes for the re-siting of th[illegible] press at Hastings Street, Calcutta, and for strengthening of th[illegible] capacity of various presses. The new schemes proposed to [illegible] taken up during 1970-71 include the augmentation of capaci[illegible] of existing presses for Army Headquarters, and the setting up Science and Hindi printing presses.

ANNEXURE 20.1

Outlay on Statistics by States and Union Territories

(Rs. lakhs)

sl. no.	states/union territories	outlay
(0)	(1)	(2)
	States	
1.	Andhra Pradesh	2
2.	Assam	3
3.	Bihar	2
4.	Gujarat	2
5.	Haryana	3
6.	Jammu and Kashmir	3
7.	Kerala	3
8.	Madhya Pradesh	2
9.	Maharashtra	2
10.	Mysore	4
11.	Nagaland	4
12.	Orissa	2
13.	Punjab	9
14.	Rajasthan	4
15.	Tamil Nadu	2
16.	Uttar Pradesh	3
17.	West Bengal	3
	Total States	53
	Union Territories	
18.	Delhi	1.60
19.	Goa, Daman and Diu	1.72
20.	Himachal Pradesh	1.00
21.	Manipur	1.69
22.	N.E.F.A.	1.97
23.	Pondicherry	0.29
24.	Tripura	1.45
25.	Other Union Territories (A & N Islands, Chandigarh, Dadra & Nagar Haveli and LM & A. Islands)	0.30
	Total Union Territories	9.93
	Total—*States & Union Territories*	62.93



APPENDIX

List	Description	Pages
I	Centrally Sponsored Schemes by Heads and Sub-Heads of Development for 1970-71	211—216
II	Agriculture and Allied Programmes for 1970-71—Centre	217—226
III	Irrigation and Flood Control Schemes for 1970-71—Centre	227
IV	Power Programmes for 1970-71—Centre	228
V	Village and Small Industries Schemes for 1970-71—Centre	229
VI	Industrial and Mineral Projects for 1970-71—Centre	230—233
VII	Transport and Communications Schemes for 1970-71—Centre	234—237
VIII	Education Programmes for 1970-71—Centre	238—245
IX	Scientific Research Programmes for 1970-71—Centre	246
X	Health Programmes for 1970-71—Centre	247—249
XI	Family Planning Schemes for 1970-71—Centre	250
XII	Housing, Urban Development and Water Supply Programmes for 1970-71—Centre	251
XIII	Social Welfare Programmes for 1970-71—Centre	252
XIV	Labour Welfare and Craftsmen Training Schemes for 1970-71—Centre	253
XV	List of Important Projects under Irrigation, Power and Industry during 1970-71—States and Union Territories	254—258

APPENDIX

LIST I

Centrally Sponsored Schemes by Various Heads and Sub-Heads of Development for 1970-71

(Rs. lakhs)

Sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
	Agriculture and Allied Programmes	
	agricultural production	
	development of commercial crops for export promotion	
1.	maximised production of cotton	89.85
2.	maximised production of groundnut including introduction of groundnut in new areas	80.00
3.	maximised production of castor	3.46
4.	special package programme on jute	22.00
5.	special package programme on mesta	5.00
6.	subsidised distribution of improved and certified seeds of jute and mesta	10.00
7.	aerial spraying on jute	3.00
8.	quality improvement programme of jute and mesta	5.00
9.	development of V.F.C. tobacco	25.00
10.	pilot project for the development of sugarbeet	0.62
11.	Extension work and package programme on lac	1.00
12.	package programme for development of coconut including production and distribution of improved seedlings	5.60
13.	package programme for cashewnut	12.28
14.	package programme for arecanut	0.93
15.	package programme for development of spices including establishment of Central Nursery for Pepper & Ginger	3.07
16.	development of fruit production for export	10.00
	Total Commercial crops	276.81
17.	scheme for integrated dry land agricultural development	200.00
17.(a)	agricultural extension and training—farmers' education and training	100.00
18.	agricultural statistics—timely reporting of estimates of area and production of principal crops	14.00
	Total—Agricultural Production	590.81

LIST I—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	soil conservation	
19.	pilot projects for reclamation of ravine lands	30.00
20.	soil survey in IADP and problem areas	7.50
21.	soil and water conservation in the water sheds of river valley projects	300.00
	Total	**337.50**
	animal husbandry	
22.	progeny testing of bulls	3.00
23.	rinderpest eradication	10.00
24.	training centre for sheep-husbandry and wool technology	0.05
25.	sheep breeding farms	20.00
	Total	**33.05**
	forestry	
26.	forest resources survey	20.00
	fisheries	
27.	provision of landing and berthing facilities at minor ports warehousing, marketing & storage	150.00
28.	loans to State Governments for providing village grain storage bins to the farmers	40.00
	food processing & subsidiary foods	
29.	food-craft institutes	14.00
	cooperation	
30.	agricultural credit stabilisation fund	200.00
31.	margin money requirements of cooperatives for distribution of chemical fertilisers	300.00
32.	contribution to stabilisation fund	0.75
	Total Cooperation	**500.75**
	community development	
33.	applied nutrition programme	180.00
34.	pilot research projects in growth centres	24.00
	Total—Community development	**204.00**
	Total—Agriculture and allied programmes	**1890.11**

LIST 1—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	Power	
35.	inter-state lines	500.00
	Village and Small Industries	
36.	intensive development of rural industries (rural industries projects)	114.09
37.	collection of statistics relating to small scale units in the unorganised sector	10.00
	Total	**124.09**
	Transport and Communications	
	roads	
38.	roads of inter-state or economic importance	243.50
39.	schemes in union territories	40.00
	Total	**283.50**
	minor ports	
40.	minor ports development scheme	160.00
	inland water transport	
41.	cost of ferry crafts for inland water transport	2.00
42.	development scheme of inland water transport	50.00
	Total	52.00
	Total— Transport and Communications	**495.50**
	Education	
	general education	
43.	appointment of Hindi teachers in non-Hindi States	100.00
44.	financial assistance for establishment of Hindi teachers training colleges in non-Hindi speaking States	10.00
45.	production of literature at university level	85.00
46.	establishment of regional language centres and appointment in Hindi states teachers of other modern Indian languages	10.00
47.	development of Sanskrit	10.00
	Total—General education	**215.00**

LIST I—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	technical education	
48.	development of regional engineering colleges	344.00
49.	development and consolidation of Post-graduate courses and research in Engineering and Technology	80.00
	Total—technical education	**424.00**
	Grand total—education	**639.00**
	Health	
	medical education and training	
50.	upgrading of certain departments in medical institutions in India	85.00
51.	physio-therapists, occupational therapists and prosthetic technicians (stipends)	2.28
	control of communicable diseases	
52.	malaria eradication programme (cost of material and equipment—Rs. 641.68 lakhs and subsidy to States—Rs. 770 lakhs)	1411.68
53.	national small-pox eradication programme	200.00
54.	development of freeze dried small-pox vaccine manufacturing institutes	20.00
55.	national filaria control programme	54.48
56.	control of venereal diseases	13.27
57.	cholera control programme	15.00
58.	leprosy control programme	48.78
59.	national TB control programme	211.67
60.	control of trachoma	5.75
	primary health centres	
61.	strengthening of primary health centres with basic health services	400.00
	indigenous systems of medicine	
62.	upgrading of teaching institutions and research	15.00
	other programmes	
63.	establishment of psychiatric clinics in district and teaching hospitals	00
64.	national T.B. programme for Delhi including material and equipment under USAID programme, anti-T.B. drugs for T.B. clinics in Delhi Chardigarh, Laccadive and Minicoy, tribal areas and Andaman and Nicobar	6.85
65.	Contral of U.D. in Delhi and Andaman and Nicobar	0.06

LIST I—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
66.	malaria eradication programme in Delhi, Chandigarh, tribal areas, Andaman and Nicobar	23.77
67.	other programmes	20.02
	Total—health	**2536.61**
	Family Planning	
services		
68.	continuation and establishment of rural FWP centres at PHCs, rural sub-centres and urban centres, sterility centres and helpers	1945.00
69.	supply of sterilisation equipment and vehicles to rural FWP centres	
70.	continuation and establishment of distt. FP bureaux and additional vehicles for supervision	435.75
71.	construction of buildings for FWP centres and sub-centres	580.32
72.	continuation and establishment of static sterilisation units sterilisation beds and	112.00
73.	compensation for IUCD and sterilisation	759.12
74.	conventional contraceptives	125.00
75.	post-partum centres	62.10
76.	supply of surgical equipment to hospitals	4.00
77.	construction of sterilisation theatres	8.00
78.	city FP bureaux	6.00
79.	services through intensive distt. and selected area programme	73.45
80.	state health transport organisation	50.00
	Total	**4160.74**
training		
81.	continuation of regional FP training centres	78.15
82.	training of ANMs and dais and other training programmes	35.00
83.	construction of regional FP training centres	30.00
84.	training of LHVs	10.00
85.	training of homoeopaths and ISM practitioners	5.00
86.	equipment and vehicles for regional FP training centres	15.00
	Total	**173.15**
mass education		
87.	mass education and media programme including orientation camps	154.00
	Total	**154.00**
research		
88.	demographic research centres, Kerala	1.00
89.	communication action research at PRAI, Lucknow	2.50
	Total	**3.50**

LIST I—*Concld.*

(Rs. lakhs)

(0)	(1)	(2)
	maternity and child health	
90.	immunisation of infants and pre-schoolage children with DPT and expectant mothers against tetanus	4.61
91.	prophylaxis against nutritional anaemia among mothers and children	48.00
92.	nutritional programme for control of blindness among children caused by vit. A deficiency	
	Total	**52.61**
	organisation	
93.	continuation of state secretariat cell, state FP bureaux, and establishment of demographic and evaluation cell, audit parties, awards and meetings and conferences	**74.71**[1]
	Total	74.71
	Total—Family Planning	**4618.71**[1]
	Water Supply	
94.	special investigation divisions	40.00
	Welfare of Backward Classes	
95.	tribal development blocks	528.00
96.	post-matric scholarships	**149.00**[2]
97.	girls' hostels	36.70
98.	cooperation	44.70[4]
99.	tribal research and training	12.50
100.	career planning	20.34[5]
101.	improvement in living conditions	57.25
102.	de-notified and nomadic tribes	89.85[6]
103.	aid to all-India voluntary organisations	33.00
104.	welfare of backward classes schemes (centrally sponsored) in union territories	20.08
	Total—Backward Classes	**991.42**
	Social Welfare	
105.	pre-vocational training centre	40.50

[1] includes recanalisation

[2] includes Rs. 0.31 lakh on account of Andaman and Nicobar

[3] Rs. 5 lakhs for the scheme of post-matric scholarships to state students at Chandigarh

[4] Rs. 20 lakhs for loans to cooperatives

[5] Rs. 2.04 lakhs for coaching-cum-guidance centre

[6] Rs. 0.30 lakhs loans for rehabilitation of denotified tribes

LIST II

Agriculture and Allied Programmes for 1970-71—Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
	Agricultural Production	
1.	tractor training centres and workshops	9.93
2.	National Seeds Corporation	60.00
3.	Central State Farm Corporation	120.00
	fertilizers & manures	
4.	central fertilizer control laboratory	2.00
5.	directorate of fertilizer promotion	20.00
6.	fertilizer godowns	50.00
	Total—Fertilizers and manures	72.00
	plant protection	
7.	strengthening of Dte of plant protection, quarantine and storage	0.21
8.	estt. of central plant protection training institute-cum-field testing station	2.97
9.	study of pest infestation in storage conditions and remedial measures to prevent storage losses	0.15
10.	expansion of plant quarantine facilities	0.56
11.	pest and disease surveillance service	0.25
12.	expansion of field station for investigation on locusts	0.23
13.	strengthening of agril. aviation service	28.23
	Total—Plant Protection	32.60
	agricultural extension and training	
14.	scheme for improving the professional competance of senior officers in agri./animal husbandry	0.30
15.	concentrated subject-matter refresher courses for instructress	0.28
16.	training-cum-production scheme for farm mechanics at workshop wings attached to E.E.I. Nilokheri	0.20
17.	upgrading of workshop wing at E.E.I. Nilokheri	0.45
18.	setting up of information-cum-workshop division	0.49

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
19.	all India crop competitions	0.20
20.	intensive agricultural district programme (Head Quarters)	6.18
21.	establishment of extension deptt in home science colleges	5.40
22.	procurement of publicity-cum-exhibition vans	0.16
23.	farmers training & education through audio visual methods (staff at National Head Quarters etc.)	4.75
24.	mobile soil testing laboratories (spill-over)	2.37
25.	evaluation of extension training and farmers training programme	10000
26.	establishment of test kitchens at the head-quarters of the regional home economists	
27.	strengthening of extension education institute at Anand, Hyderabad and Nilokheri	
28.	international youth farmers exchange programme with the countries other than the U.S.A.	
29.	scheme for exchange of farmers within the country	
30.	organisation of national and regional workshops for young farmers leaders supervisions	
31.	livestock shows	2.50
32.	fertilizers demonstration	0.56
33.	miscellaneous items such as local living cost of experts, Dte of extension etc.	11.38
	Total—Agricultural extension and training	35.82
34.	production of agril. instructional films	15.00
	I.C.A.R. schemes	
35.	coordinated projects pilot research schemes—	
	(a) *food corps*	
	(1) rice	45.00
	(2) wheat	10.00
	(3) barley	5.00
	(4) maize	12.00
	(5) sorghum	7.00
	(6) millets	7.00
	(7) pulses	8.00
	Total—Food corps	94.00

LIST II —*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	(b) *commercial crops*	
	(1) sugarcane	4.00
	(2) sugarbeet	1.00
	(3) cotton	20.00
	(4) jute	7.00
	(5) oilseeds	27.05
	(6) soyabeens	2.78
	(7) tobacco	1.50
	(8) spices & cashewnut	3.00
	(9) coconut & arecanut	5.00
	total—commercial crops	71.33
	(c) *horticulture*	
	(1) fruits (including mango malformation and research on citrus die-back)	8.80
	(2) tuber crops	1.60
	(3) potato	1.00
	(4) vegetables	5.00
	(5) certification, inspection and registration of virus free citrus trees	1.72
	(6) establishment of regional research stations for medicinal and aromatic plants	1.00
	(7) horticulture	0.50
	total—Horticulture	19.62
	(d) others	
	(1) forage crops	3.00
	(2) technological research on vegetable oils and oilseeds	5.00
	total—others	8.00
	total	192.95
36.	research in soils, agronomy and agricultural engineering—	
	soil and water management	
	(1) coordinated agrononic experiments	37·17
	(2) co-relation of soil tests with crops responses	3.13
	(3) micronutrients of soils	4.40
	(4) soil structure	3.00
	(5) microbiological decomposition of organic matter	2.90
	(6) irrigation research in river valley projects	4.00

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	(7) research on new cropping patterns water use in selected command areas	4.50
	(8) strengthening of research on soil salinity, irrigation drainage and water management	14.00
	(9) ground water management	2.25
	(10) strengthening of research under rainfed conditions	5.00
	(11) national demonstration on major food crops	40.00
	(12) long term fertiliser experiments	0.17
	total	**120.52**
37.	animal sciences research—veterinary & animal husbandry	50.00
38.	agricultural education	
	(1) establishment and development of agricultural universities	283.00
	(2) improvement of facilities in—	
	(a) post-graduate colleges of agricultural sciences (b) under-graduate colleges of agricultural sciences (c) post-graduate colleges of veterinary sciences (d) under-graduate colleges of veterinary dairy	20.00
	(3) improvement of facilities in agricultural colleges of Central Universities (Banaras Hindu University and Vishwabharati)	5.00
	(4) award of under-graduate scholarships—	
	(a) merit scholarships for study in agriculture veterinary/ agricultural engineering (b) agricultural science talent research scheme	15.00
	(5) award of fellowships for post-graduate students—	
	(a) fellowships for M.Sc./Ph.D. (b) graduate assistantships	34.65
	total— Agricultural education	**357.65**
39.	economics and statistics	
	agricultural research statistics and agricultural economics	
	(1) national index of field experiments	2.50
	(2) pilot studies for evolving sampling techniques for estimation of cost of production of poultry and eggs	1.25
	(3) pilot studies on the impact of milk supply on rural economy	2.48
	(4) pilot sample surveys for developing techniques for estimation of production of fruits and vegetables	2.00
	(5) pilot sample surveys for developing techniques for estimation of production and extent of cultivation of cashew-nut	1.24

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	(6) pilot sample survey for block level estimates of agricultural production	0.67
	(7) pilot investigations for developing and integrated technique for estimation of output of major livestock products and attendent animal husbandry practices	4.38
	(8) pilot sample surveys for estimation of availability of cost of production of milk and its index	1.14
	(9) sample survey for assessment of high yielding varieties programmes	10.00
	(10) pilot sample surveys for studying the incidence of pests and diseases on crops and consequent crop losses	..
	(11) completion of building and furnishing the computer laboratory and library and provision of equipment at IARS	5.00
	(12) pilot studies on pre-harvest fore-casting of crops	2.50
	(13) pilot studies for estimation of birth and death rates in bovines for preparation of life tables	0.07
	(14) strengthening of research and training facilities at the IARS	2.00
	total	35.23
40.	agricultural and animal sciences research in centrally administered areas	3.00
41.	agricultural research institutes	
	(1) indian agricultural research institute	85.00
	(2) central rice research institute	3.00
	(3) central potato research institute	5.61
	(4) central jute agricultural research institute	2.86
	(5) central tobacco research institute	3.15
	(6) central tuber crops research institute	1.00
	(7) indian grassland & fodder research institute	28.00
	(8) institute of horticulture research	15.65
	(9) jute technological research laboratory	7.00
	(10) indian lac research institute	1.00
	(11) cotton technological research laboratory	5.73
	(12) central arid zone research institute and soil conservation centres	10.00
	(13) soil salinity research institute	9.99
	(14) institute of sugarcane research	2.85
	(15) sugarcane breeding institute	2.00
	total	182.84

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
42.	animal sciences institutes	
	(1) indian veterinary research institute	45.00
	(2) national dairy research institute	29.82
	(3) central sheep & wool research institute	1.00
	(4) plant & animal virus research institute	[1]
	total	**75.82**
43.	fisheries research institutes	
	(1) central inland fisheries research institute	6.00
	(2) central marine fisheries research institute	16.00
	(3) central institute of fisheries technology	10.00
	total	**32.00**
	total for research institutes	**290.66**
	grand Total for all schemes of ICAR	**1050.01**
	agricultural statistics	
44.	agricultural census	0.50
45.	agro-economic research centres	5.20
46.	farm management studies	9.81
47.	coordinated scheme for studying the cost of cultivation of principal crops in India	12.25
48.	crop insurance	1.00
49.	cattle insurance	1.14
	total—agricultural statistics	**29.90**
50.	national centre for land reforms	3.00
51.	special development programmes (excluding area development)	
	(1) water resources and agril. study in Punjab, Haryana and Narbada etc.	[1]50.00
	(2) integrated development of desert area in Rajasthan, Haryana & Gujarat	50.00
	total	**100.00**
52.	scheme of small farmers (including sub-marginal farmers and agril. labourers)	450.00

[1]Deferred.

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
53.	agril. marketing	
	(1) award of stipend to trainees	1.00
	(2) setting up a lint unit at Surat	0.49
	(3) extension of compulsory quality control to other commodities	0.62
	(4) se ting up of livestock cell in the D.M. & I.	0.20
	total	**2.31**
	total—agril. production	**1980.57**
	Minor irrigation (E.T.O.)	
1.	groundwater exploration project	234.50
2.	U.N.S.F. project	7.00
3.	training scheme	0.75
	total	**242.25**
	soil conservation	
1.	all india soil and land use survey	1.40
2.	resources inventory centre	0.48
	total	**1.88**
	area development & water management	
1.	area developmen programme	160.00
2.	regional water management units	20.00
	total	**180.00**
	animal husbandry and dairying	
1.	establishment of cattle farms	11.03
2.	expansion of jersey farm	0.41
3.	expansion of herd registration scheme	1.83
4.	distribution of calves from milk colonies and khattals	1.52
5.	estt. of regional forage demonstration station	5.00
6.	estt. of large scale sheep farm	4.00
7.	coordn. poultry breeding programme at regional farms	2.23
8.	animal welfare board	0.60
9.	ICD projects in DMS milkshed areas	50.00
10.	frozen semen bank	2.35
11.	animal quarantine service	1.02
12.	slaughter houses	10.00
	total	**89.90**

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	dairying and milk supply	
1.	Delhi Milk Scheme	75.00
2.	Indian Dairying Corporation	781.00
	total	**856.00**
	forestry	
1.	forest research institute	20.00
2.	pre-investment survey of forest resources	33.00
3.	logging training project	4.24
4.	delhi zoological park	1.23
	total	**58.47**
	fisheries	
1.	central institute of fisheries education	32.81
2.	central institute of fisheries operation	39.15
3.	deep sea fishing station	65.63
4.	indo-norwegian project	80.25
5.	major harbours	131.57
6.	refrigeration	15.00
7.	cooperative and corporations	5.00
8.	pelagic fisheries	5.65
9.	extension	1.00
10.	off-shore and deep sea fishing	5.00
11.	scheme for development of fisheries in sunderbans	1.25
	total	**382.31**
	storage and warehousing	
1.	central warehousing corporation	70.00
2.	applied research demonstration and training project in grain storage	
3.	guaranteed dividends to shareholders of central warehousing corporation	
4.	construction of food storage godowns	27.50
5.	material and equipment in T.C.A. programme	8.40
6.	food corporation of India	1365.00
7.	construction of fertiliser storage godowns	50.00
8.	food grain storage and warehousing applied research, demonstration and training, proeject in grain storage	8.55
9.	food grain storage and warehousing save grain compaign	5.00
	total—storage and warehousing	**1534.45**

LIST II—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	food processing and subsidiary foods	
1.	national sugar institute, Kanpur	20.01
2.	modern bakeries	20.00
3.	rice milling programmes (including Bihar project areas)	0.15
4.	subsidiary foods schemes	89.91
5.	state governments for catering institutes	6.00
6.	modernization of rice mills	2.60
7.	central food technological research institute, Mysore	0.25
8.	Indian Institute of Technology, Kharagpur	20.00
9.	schemes relating to subsidiary food nutrition—balahar (net)	50.00
10.	printing and publication	1.70
11.	research scheme for production of protein from lush vegetation at agri. college, Coimbatore	0.32
	total—food processing and subsidiary foods	**210.94**
	central support to financial institutions	
1.	share capital contribution to state agricultural credit corporations	30.00
2.	agricultural refinance corporation	3500.00
3.	state agro-industries corporation	350.00
4.	debentures of land development mortgage banks	1700.00
5.	central agro-industries corporation	0.01
6.	share capital contribution to fertiliser credite guarantee corporation	15.00
	total—central support to financial institutions	**5595.01**
	cooperation	
1.	national cooperative development corporation for financing of block capital costs of cooperative processing units	125.00
2.	committee for cooperative training	42.21
3.	national cooperative union of India	3.10
4.	grants to national consumers federation	1.75
5.	local cost of foreign experts	5.00
6.	seminar publications etc. relating to consumers cooperatives	0·15
7.	investment in the share capital of national cooperative federation for consumers industry	5.00
8.	investment in the share capital of cooperative fertilizer factory	1675.00
9.	construction of godowns cum office building	1.25
	total—cooperation	**1858.46**

LIST II—*Concld.*

(Rs. lakhs)

(0)	(1)	(2)
	community development and panchayati raj	
1.	composite nutrition programme for women and pre-school children	29.00
2.	incentive awards to yuvak mandals	21.00
3.	training of associate women workers	3.50
4.	sammelans	3.00
5.	training of youth workers in rural areas	2.00
6.	orientation of school teachers in community development	0.82
7.	literature for non-officials associated with panchayati raj	0.50
8.	research through universities and other institutions	3.77
9.	basic and cultural literature for neo-literate	1.00
10.	prize competition scheme	1.00
11.	establishment of the institute of training of youth in village occupation	..
12.	photographic competition	1.00
13.	production of films on C.D.P. & R.	5.00
	total—community development and panchayati raj	**71.59**

APPENDIX

LIST III

Irrigation and Flood Control Schemes for 1970—71 Centre

(Rs. lakhs)

(0)	(1)	(2)
	I. *Continuing Schemes*	
1.	investigations	35.82
2.	expansion of C.W. & P.C.	17.57
3.	expansion of C.W.&P.R.S., Poona	48.10
4.	expansion of C.S.M.R.S.—existing unit	0.30
5.	construction of buildings for laboratory and library	17.95
6.	technical training centres	19.10
7.	research connected with River Valley Projects	25.00
8.	Ganga Basin Water Studies	29.76
9.	flood forecasting and warning organisation—Yamuna and Sahibinadi	1.08
	total continuing schemes	**194.68**
	II. *New Schemes*	
10.	national network for collection of basic hydrological data	47.87
11.	expansion of CW&PC—strengthening of floods control organisation	5.00
12	directorate of training	
13.	exhibition & publicity	
14.	expansion of C.W.&P.R.S., Poona	13.29
15.	Irrigation Commission	6.00
16.	regional organisation for river basin studies	37.14
17.	procurement of dredgers	172.50
18.	flood forecasting and warning centres	40.00
19.	pilot project for writing the history of the major projects	1.00 (token provision)
	total new schemes	**322.80**
	total—irrigation & flood control	**517.48**

APPENDIX

LIST IV

Power Programmes for 1970–71–Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
	Ministry of Irrigation and Power	
1.	power research institute and switchgear testing and development station	55.02
2.	load despatch training institute	0.10
3.	fundamental and basic research on power	12.00
4.	hydro and thermal designs division, CWPC	2.52
5.	survey and investigations	20.48
6.	Badarpur thermal power station	1200.00
7.	load despatching stations	20.00
8.	Salal hydro-electric project	100.00
9.	Loktak hydro-electric project	150.00
10.	Siul-Bhaira hydro-electric project	300.00
11.	rural electrification corporation	2000.00[1]
	total	**3860.12**[1]
	Damodar Valley Corporation	**1567.00**[2]
	Department of Mines & Metals	
	Neyveli Thermal Station Expansion	93.00[3]
	Department of Atomic Energy	
1.	Tarapur atomic power station	90.76
2.	Rajasthan atomic power station—I unit	740.00
3.	Rajasthan atomic power station—II Unit	1240.00
4.	Madras atomic power station—I Unit	638.24
5.	Madras atomic power station—II Unit	130.00
6.	Preliminary expenditure on new atomic power station	4.00
	total	**2843.00**
	total—power	**8363.12**

[1]Includes Rs. 1400 lakhs to be met from other sources.

[2]Includes Rs. 600 lakhs internal resources of the DVC and balance from borrowings. Outlay is tentative subject to confirmation by D.V.C.

[3]To be met from internal resources.

APPENDIX

LIST V

Village and Small Industries Schemes for 1970–71–Centre

(Rs. lakhs)

sl. no.	head of development/scheme	Outlay 1970-71
(0)	(1)	(2)
	Khadi and Village Industries	
1.	traditional and ambar khadi	999.00
2.	development of village industries	575.00
3.	khadi and village industries (subsidy in lieu of concession in the rate of interest on loans)*	379.60
	total	1953.60
	Handloom Industry	
4.	development schemes for handloom industry	7.15
	Handicrafts	
5.	design centres	1.01
6.	research centres	1.09
7.	training and extension	8.19
8.	marketing	0.88
9.	exhibition	3.50
10.	publicity and propaganda	4.00
11.	museums	
12.	other (including loans to other parties)	8.15
	total	26.82
	Silk Industry	
13.	development schemes for silk industry	9.65
	Coir Board	
14.	plan schemes of coir boards	0.62
	Small Scale Industries	
15.	development commissioner's establishment	19.39
16.	national small industries corporation	176.00
17.	U.N.D.P. projects	22.70
18.	new schemes	17.50
19.	others	17.00
	total	252.59
	grand total	2250.43

*This relates to scheme Nos. 1 and 2. Its break-up between the programmes for the development of khadi and village industries being not available, the item has been shown separately.

APPENDIX

LIST VI

Industrial and Mineral Projects for 1970–71–Centre

(Rs. lakhs

sl. No.	name of the project	outlay 1970-71
(0)	(1)	(2)
	Ministry of Steel & Heavy Engineering	
	Iron & Steel	
1.	Hindustan Steel Ltd.	3039.00 (3039.00)
2.	Bokaro Steel Ltd.	17750.00
3.	Tenughat dam	200.00
	total—iron and steel	**20989.00**
	Heavy Engineering Projects	
4.	Heavy Engineering Corporation	945.68
5.	Mining & Allied Machinery Corporation	85.45
6.	Triveni Structurals Ltd	42.40
7.	Bharat Heavy Plate & Vessels Ltd	368.76
	total—heavy engineering projects	**1442.29**
	total—Ministry of Steel & Heavy Engineering	**22431.29**
	Ministry of Petroleum & Chemicals and Mines and Metals (Department of Mines & Metals)	
8.	Korba Aluminium	1240.00
9.	Koyna Aluminium	
10.	Hindustan Zinc Ltd.	396.87 (50.00)
11.	N.C.D.C.	1277.00 (100.00)
12.	N.M.D.C.	1490.00
13.	Neyveli Lignite Corporation†	346.00 (307.00)
14.	Central Ropeways Scheme (Coal Board)	110.00
15.	Geological Survey of India	300.00
16.	Indian Bureau of Mines	10.00

†An addition, an outlay of Rs. 93 lakhs has been provided for 1970-71 unde power schemes.

LIST VI—*contd.*

(Rs. lakhs)

(0)	(1)	(2)
17.	Hindustan Copper	2056.67
18.	aerial survey	88.00
19.	feasibility studies including DRR for Visakhapatnam project	41.75
20.	Pyrites, Phosphates & Chemicals Ltd.	119.34
	total—Deptt of Mines & Metals	7475·63

Department of Chemicals

Fertilizer Corporation of India

21.	Namrup Fertilizer Project	6131.15 (668.65)
22.	Gorakhpur Fertilizer Project	
23.	Durgapur Fertilizer Project	
24.	Sindri Rationalisation Scheme	
25.	Barauni Fertilizer Project	
26.	Namrup Expansion	
27.	Trombay Expansion	
28.	New Fertilizer Projects	
29.	Cochin Fertilizer Project	277.00
30.	fourth stage expansion of FACT	
31.	Madras Fertilizer Project	1978.00 (478.00)

Indian Drugs & Pharmaceuticals

32.	Synthetic Drugs Plant	190.00
33.	Antibiotics Plant	
34.	Hindustan Antibiotics Ltd.	47.00 (47.00)
35.	Hindustan Insecticides Ltd.	2.31 (2.31)
36.	Hindustan Organic Chemicals Ltd.	300.00
37.	Indian Petro-Chemicals Corporation Ltd.	1088.71
38.	Central Institute of Plastic Engg—Guindy	18.25
	total—Deptt of Chemicals	10032.42

LIST VI—*Contd*

(Rs. lakhs)

(0)	(1)	(2)
	Department of Petroleum	
39.	Oil & Natural Gas Commission	4154.21 (2995.00)
40.	Indian Oil Corporation	2100.00 (2100.00)
41.	Madras Refinery	72.69
42.	Lube India Ltd.	75.00 (37.50)
	total—Deptt of Petroleum	**6401.90**
	total—Ministry of Petroleum & Chemicals and Mines and Metals	**23909.95**
	Ministry of Industrial Development, Internal Trade & Company Affairs (Department of Industrial Development)	
43.	Heavy Electricals Ltd.	282.00
44.	BHEL (including Foundry Forge Project)	725.00
45.	Hindustan Machine Tools Ltd.	245.00
46.	Machine Tools Corporation	254.00
47.	R & D for electrical industries	11.10
48.	central agency for inspection of boilers	1.00
49.	Hindustan Cables Ltd.	
	(i) Aluminium Sheathing Plant (ii) Expansion of dry core-cables (iii) Second Cable Factory	180.00 (40.00)
50.	National Instruments Ltd. (including ophthalmic glass project)	48.00
51.	Instrumentation Ltd.	103.55 (98.55)
52.	Cement Corporation of India	266.00
53.	Expansion of NEPA Mills	267.65 (112.65)
54.	Hindustan Photo Films	60.00
55.	Travancore Titanium Products	60.00
56.	National Productivity Council	3.10
57.	Indian Standards Institution	8.50
58.	Machine Tools Design Institution, Bangalore	28.25
59.	Tannery and Footwear Corporation of India Private Ltd.	11.00
60.	Hindustan Salt Ltd.	0.75

LIST VI—*Contd.*

(Rs. in lakhs)

(1)	(2)	(3)
61.	Bharat Pumps & Compressors	125.00
62.	Paper Corporation	75.00
63.	Gas Cylinder Project	65.00
64.	expenditure in connection with Institution of Projects	0.30
65.	All India Institute of Weights & Measures	2.43
	total—Deptt of Industrial Development	**2812.63**
	Ministry of Transport & Shipping	
66.	Hindustan Shipyard (Subsidy)	120.00
67.	Hindustan Shipyard (Development)	150.00
68.	Hindustan Shipyard (dry dock)	110.00
69.	Second Shipyard, Cochin	300.00
	total—Ministry of Transport & Shipping	**680.00**
	Ministry of Finance	
70.	Security Paper Mill	23.63
71.	Kolar Gold Mines	74.23
72.	Alkaloid Factory, Neemuch	19.00
73.	Bombay Mint (quarter)	30.26
74.	Alipore Mint (quarter)	
75.	India security press (staff quarters and hospital)	14.46
76.	Loan assistance to financial institutions	6500.00
77.	Support to industrial financial institutions by R.B.I.	
78.	Currency note press	9.46
79.	Printing Press for bank note paper	29.25
	total—Ministry of Finance	**6700.29**
	Ministry of Foreign Trade & Supply	
80.	National Textile Corporation	231.00
81.	Plantations	284.98 (67.00)
82.	National Industrial Development Corporation	30.00
	total—Ministry of Foreign Trade and Supply	**545.98**
	Department of Atomic Energy	
83.	Atomic Energy Programmes	1527.81
84.	Loans to Indian Rare Earths Ltd.	60.00
	total—Deptt of Atomic Energy	**1587.81**
	grand total	**50668.95**

Figures in brackets (Rs. 10142.66 lakhs) indicate the internal resources of respective undertakings or contribution by the foreign collaborator.

APPENDIX

LIST VII

Transport and Communications Schemes for 1970–71–Centre

(Rs. lakhs)

sl. no.	head of development/schemes	outlay 1970-71
(0)	(1)	(2)
	Railways	
1.	rolling stock	12369.00
2.	workshops and sheds	567.00
3.	machinery and plant	484.00
4.	track renewals	3306.00
5.	bridge works	648.00
6.	line capacity works	4539.00
7.	signalling and safety	1188.00
8.	electrification	1655.00
9.	other electrical works	236.00
10.	staff quarters	614.00
11.	users' amenities	392.00
12.	staff welfare	315.00
13.	new lines	1721.00
14.	other specified works	285.00
15.	investment in road services	198.00
16.	inventories etc.	(—)590.00
17.	metropolitan transport	73.00
	total	**28000.00**
18.	deduct expenditure on depreciation account	10000.00
	total	**18000.00**
	Roads	
19.	national highways	3527.98
20.	emergent roads	
21.	lateral roads	
22.	special roads	550.00
23.	tools and plants	82.40
	total	**4160.38**

LIST VII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	Road Transport	
24.	Central Road Transport Corporation	40.00
25.	Central Road Transport Research and Training Institute	7.00
	total	47.00
	Major Ports	
26.	development schemes of major ports (loans to port trusts)	2300.00
27.	Mangalore port	425.00
28.	Tuticorin port	425.00
29.	central dredging pool	642.74
30.	corrective works on the Bhagirathi Hooghly Rivers	227.60
	total	4020.34
	Minor Ports	
31.	Andaman & Nicobar Islands	116.00
32.	Laccadiv, Minicoy & Amindiv Islands	18.50
33.	dredging-cum-survey pool for minor ports	46.00
	total	180.50
	Shipping	
34.	Shipping Development Fund Committee (Loans)	2100.00
35.	Shipping Development Fund (Subsidy)	221.75
36.	Shipping Development Fund Committee (administrative expenses)	1.40
37.	sailing vessels industry (loans and subsidy)	25.00
38.	public works	10.31
39.	subsidy in lieu of concessions in the rate of interest on loans	2.32
40.	grant in aid to the Bombay Port Trust	1.00
	total	2361.78
	Inland Water Transport	
41.	higher training scheme for inland water transport personnel	0.17
42.	development of Pandu port	0.10
43.	regional organisations	1.00
44.	Central Inland Water Transport Corporation	188.50
45.	development of Jigigopa port	1.40
	total	191.17

LIST VII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	Lighthouses	
46.	lighthouses	101.27
47.	lightships	
48.	others	
	Civil Air Transport	
	Civil Aviation Department	
49.	works at aerodromes	763.04
50.	aeronautical communication service	88.65
51.	air routes and aerodromes equipment	144.35
52.	training and education	4.37
53.	research and development	9.78
54.	Hindustan Aeronautics Limited—Subsidy for aircraft sold or to be sold to IAC	13.73
	total	**1023.92**
	Indian Air-Lines	
55.	expansion programmes of Indian Airlines	2172.00[1]
	Air India	
56.	expansion of Air India	1225.00[2]
	Indian Meteorological Department	
57.	capital equipment	226.84
58.	capital works	
59.	others	
	total—Civil air transport	**4647.76**
	Farakka Barrage	
60.	construction and other works	1900.01
	Tourism	
61.	development of tourist centres	5.00
62.	India Tourism Development Corporation	257.00
63.	hotel development loan fund	150.00
64.	development of tourism organisation	30.10
65.	other works	90.00
66.	transport loan fund	5.00
	total	**537.10**

[1]Includes Rs. 772 lakhs of internal resources and Rs. 1400 lakhs as loan by the Government.

[2]Includes Rs. 725 lakhs on internal resources.

LIST VII—*Concld.*

(Rs. lakhs)

(0)	(1)	(2)
	Communications	
	Posts and Telegraphs	
7.	programmes of Posts and Telegraphs Deptt	8300.00
	Other Communications	
4.	expansion of the existing units of Indian Telephone Industries .	[1]
5.	Indian Telephone Industries Ltd. (New Transmission Factory)	100.00
6.	Hindustan Teleprinter Ltd.	[1]
7.	Overseas Communications service	184.00
8.	wireless planning and coordination	16.39
	total	300.39
	total—Communications	8600.39
	Broadcasting	
1.	programmes under Broadcasting	381.55
	grand total	45129.25

[1]To be met from the internal resources of the Company.

APPENDIX

ANNUAL PLAN 1970-71

LIST VIII

Education Programmes for 1970-71-Centre

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
	GENERAL EDUCATION	
	School Education	
1.	assistance to voluntary organisations	11 00
2.	subsidy towards interest charges on loan to Children's Book Trust	0 39
	National integration	
3.	deshgeetanjali (desh Gitanjali)	2 00
4.	production of children's books to promote national integration (Nehru Bal Pustakalya)	8 00
5.	expansion of printing capacity (through German gift of presses)	72 61
6.	reorganisation & expansion of the teaching of science students throughout the school stage	1 47
7.	training centre for Education Television programmes	1 00
	total	**96 47**
	Social Education	
8.	assistance to voluntary organisations	8 00
9.	production of literature for neoliterates	3 75
10.	farmers' education—functional literacy	26 96
	Workers social education institutes	
11.	Nagpur	1 00
12.	Indore	0 57
13.	TA & D.A. to members of the National Board of Adult Education	0 15
14.	Directorate of Adult Education	0 01
	total	**40 44**

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	Higher Education	
	Ministry of Education Schemes	
15.	Institute of German Studies	1.00
16.	Institute of French Studies	1.00
17.	Institute of Advanced Study, Simla	3.00
18.	University for the hill areas of North Eastern Region	5.00
19.	loans for construction of hostels to affiliated colleges	3.00
20.	loans to universities and constitutent colleges for construction of hostels and staff quarters	2.00
21.	construction of hostels in big cities (grants to voluntary organisations	3.00
22.	assistance to institutions of higher learning	3.00
23.	Deshbandhu College, Delhi	0.50
24.	special grant to J & K University	4.09
25.	Inter-University Board (grants)	0.25
26.	deemed universities (development grants)	10.00
27.	exchange of delegations abroad	0.50
28.	Shastri Indo-Canadian Institute	10.00
29.	rural institute and rural higher education	8.47
30.	inland training of teachers and students—educational programmes	0.04
31.	summer institutes (cost of experts)	0.40
32.	University Grants Commission	2186.33[1]
33.	Dr. Zakir Hussain Memorial Committee	2.00
	total	**2243.58**
	Development of Hindi	
34.	Kendriyya Hindi Shiksha Mandal, Agra and research scheme of Mandal	3.37
35.	promotion of Hindi—schemes of Central Hindi Dte.	6.50
36.	intensive course in Hindi for Class I officers	0.65
37.	translation course in Hindi	0.48
38.	preparation of phone records, tapes etc.	0.50
39.	award of scholarships to students from non-Hindi speaking areas to study Hindi	12.07
40.	promotion of Hindi—assistance to voluntary Hindi organisations	14.00

[1]includes Rs. 150 lakhs for Jawahar Lal Nehru University.

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
41.	preparation of Hindi encyclopaedia	0.50
42.	award of prizes to Hindi writers of non-Hindi States (prizes on Hindi books)	0.25
43.	schemes of correspondence courses in Hindi	3.00
44.	grants to universities in non-Hindi speaking States for opening of Hindi departments in existing colleges	5.00
45.	propagation of Hindi abroad	2.50
	total	**48.82**
	Development of Modern Indian Languages	
46.	assistance to regional Indian languages	4.50
47.	cultural-cum-language organisations (grants)	0.50
48.	Central Standing Commission for scientific and technical terminology	68.72[1]
49.	Bhartiya Bhasha Sansthan	5.00
50.	Central Institute of English, Hyderabad	5.00
	total	**83.72**
	Development of Sanskrit	
51.	Kendiriya Sanskrit Vidyapeeth, Tirupati	2.00
52.	Lal Bhahadur Shashtri Rashtriya Sanskrit Vidyapeeth, Delhi	6.30
53.	award of scholarships	3.25
54.	production of sanskrit institutions	2.50
55.	Implementation of other recommendations of Sanskrit Commission	0.15
56.	development of Gurukulas and grant to voluntary sanskrit organisations	18.00
57.	sanskrit shiksha parishad	0.05
58.	establishment of sanskrit wing	0.25
59.	purchase and publication of rare manuscripts	2.00
60.	seminars and exhibitions	0.25
61.	opening of regional offices	0.25
	total	**35.00**
	Book Promotion	
	Cheap Publication of Text Books	
62.	honorarium for evaluation	1.25
63.	meeting of Indo-Soviet Board Text Book Board	0.30

[1]includes Rs. 65.00 lakhs for production of literature at university level. The question of reclassification of this scheme as Centrally sponsored is under reference to the Planning Commission.

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
64.	assistance to Indian authors	10.00
65.	National Book Development Board	3.50
66.	expenditure on the meeting of the National Book Development Board	0.50
67.	Participation in International Book Fare	1.00
	National Book Trust	
68.	National Book Trust—general programmes	5.80
69.	Adamn-Padan publications	5.00
	total	27·35
	Educational Planning and Coordination	
70.	implementation of the recommendations of the Education Commission	2.25
71.	strengthening of the statistical unit	2.03
72.	Indian Council of Social Science Research	25.00
73.	auroville projects (grants)	1.00
74.	pilot projects under the Ministry of Education	20.00
75.	Asian Institute of Educational Planning and Administration	2.87
76.	building for Asian Institute of Educational Planning and Administration	6.60
77.	translation of the report of the Education Commission in Regional languages	0.10
78.	research instituties in the field of social sciences of National and Regional importance	10.00
79.	Central Asian Studies	0.60
80.	People of India in Dolls	4.25
81.	International Education Year	2.00
82.	out of school science education	1.40
83.	award of fellowships (II EG)	0.75
	total	78·85
	Cultural Affairs	
84.	building grants for cultural organisations and propogation of culture among college and school students	12.50
85.	Sahitya Akadami	2.00
86.	Sangeet Natak Akademi	3.50
87.	Lalit Kala Akademi	5.00

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
88.	external culture and	3.00
	Indian Council for Cultural Relations	1.00
89.	construction of an open theatre at Purana Quila . .	0.40
90.	cultural programmes arranged by the Ministry and TA/DA of theatre experts etc.	0.10
91.	layout and development of Budhya Jayanti Park . . .	3.00
	total	**30.50**
	Gazetteers	
92.	Gazetteers and Ancient Cultural heritage	17.62
93.	revision of District Gazetteers	
94.	Who's Who of Indian Martyrs	
95.	Bhutan Gazetteers	
	Archeaology	
96.	development of archeaology	17.50
	National Archieves of India	
97.	provision of National Archieves of India	11.30
	Libraries	
	National Library, Calcutta	
98.	Central Reference Library	0.40
99.	Book Exchange Unit	
100.	National Library, Calcutta—revision of card-catalogues, etc..	8.00
101.	Delhi Public Library	10.00
102.	Central Library, Bombay	2.00
103.	T.M.S.S.M. Library, Tanjore	1.65
104.	Raza Library, Rampur	0.25
105.	voluntaries educational organisations working in the field of Public Libraries—grants to	5.00
106.	T.A. and D.A. to non-official members of Advisory Board of Libraries	0.09
	total	**27.39**
	Museums and Art Galleries	
107.	National Museum—schemes for its development and air conditioning of National Museum	10.99
108.	Nehru Memorial Museum and Library	27.00

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
109.	National Gallery of Modern Art	3.00
110.	development of Salar Jung Museum, Hyderabad	0.50
111.	Indian Museum, Calcutta	3.42
112.	Victorial Memorial Hall	0.32
113.	other expenditure for reorganisation and development of voluntary grants etc.	5.00
	total	50.23
	Cultural Institutions	
114.	Nangyal Institute of Tibetology, Gangtok	0.50
115.	Daire-Tul-massiful –Usmania, Hyderabad	0.50
116.	Institute of Tibeton Studies, Varanasi	2.93
117.	Nav-Nalanda Mahavihra and Huentsang Memorial Hall	2.00
118.	School of Buddhist Philosophy, Leh	2.42
	total	8.35
	Games, Sports and Physical Education	
119.	National Sports Organisations (Sports Federations)	10.00
120.	Mountaineering Foundation	1.00
121.	development of National Sports Centre	3.00
122.	State Sports Councils for development of sports	12.00
123.	sports talent scholarships schemes	2.40
124.	national physical efficiency drive	2.00
125.	seminar on physical education and youth welfare	0.06
126	labour and social service camps	1.25
127.	National College of Physical Education	4.50
128.	campus work projects	2.10
129.	planning forums	3.00
130.	scouting and guiding	1.00
131.	National Service Corps/N.S.O.	75.00
132.	assistance to voluntary organisations engaged with youth and welfare activities	2.00
133.	national integration—exchange of students in camps, studies etc.	10.00
134.	youth welfare boards	0.50
135.	national coaching scheme	3.00
136.	programme for youth services	35.02
137.	setting up of a Youth Centre in Delhi	2.00

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
138.	promotion of literature	0.40
139.	promotion of Yoga	1.08
140.	promotion of literature on physical education on sports	0.12
	total	173.43
	N.C.E.R.T.	
141.	grant-in-aid to B.C.E.R.T.	174.74
142.	local cost of experts and technicians and material and equipment under Foreign Programmes	2.76
	total	177.50
	Scholarships	
143.	national scholarships scheme	112.65
144.	national loan scholarship scheme	194.00
145.	merit scholarships for children of school teachers	6.38
146.	merit scholarships in residential schools studies in Public schools in India	2.02
147.	external scholarships	2.60
	total	317.65
	total – general education	3485.70
	TECHNICAL EDUCATION	
	Indian Institute of Technology	
148.	I.I.T. Kharagpur	32.18
149.	I.I.T., Bombay	45.00
150.	I.I.T., Kanpur	90.00
151.	I.I.T., Madras	70.00
152.	I.I.T., Delhi	67.39
153.	School of Planning and Architecture, New Delhi	3.00
154.	N.I.T.E.S., Bombay	10.00
155.	I.I. of Industrial Designs, Bombay	4.52
	Management Institutions	
156.	I.I.M., Ahmedabad	5.00
157.	I.I.M., Calcutta	5.00
158.	National Institute of Foundary and Forge, Ranchi	45.00
159.	Indian School of Mines, Dhanbad	5.00

LIST VIII—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
160.	establishment of regional institutes for training of teachers for polytechnics	61.07
161.	quality improvement programmes	73.00
162.	revision of salary scales of technical teachers other grants-Non-Government institutions	5.00
163.	revision of salary of technical teachers —State Government institutions (grant-in-aid to State Governments)	10.00
164.	practical training stipends schemes, programmes of apprenticeship training	135.00
165.	defence training scheme (part-time course)	1.00
166.	non-Government institutions (part-time diploma)	0.05
167.	state Government institutions (part-time diploma)	3.50
168.	non-Government institutions (part-time degree course)	1.45
169.	state Government institutions (part-time degree course)	2.00
170.	non-Government scientific and technical institutions for development and improvement, etc, including M.I.T. Madras (Central grants to private institutions)	78.00
171.	commerce education, art education and management studies at other centres	2.00
172.	construction of students hostels subsidy to state governments in lieu of concession on loans	3.20
173.	subsidy towards the interest charges on loans to the non-government engineering and technological institutions	0.01
	Construction of hostels and staff quarters at engineering and technical institutions	
174.	State Government institutions	60.00
175.	Non-Government institutions	46.79
176.	practical training hostels	0.50
177.	establishment of 4 technical schools and 4 department of advanced studies	0.25
178.	boards of apprenticeship training	3.50
	total —technical education	**868.41**
	grand total—education	**4354.11**

APPENDIX

LIST IX

Scientific Research Programmes for 1970-71—*Centre*

(Rs. lakhs)

s.no.	head of development/scheme	outlay for 1970-71
(0)	(1)	(2)
	Department of Atomic Energy (Research and Development)	
1.	Bhabha Atomic Research Centre	273
2.	Variable Energy Cyclotron Project	105
3.	Reactor Research Centre	170
4.	Space Research Laboratories	357
5.	Grants-in-aid and donation to Scientific Societies and Institutions	119
6.	Land and Buildings and Township	277
7.	Atomic Minerals	25
8.	Others	1
	total 1—*Deptt of Atomic Energy* (*R & D*)	**1327**
	Council of Sicentific and Industrial Research	
9.	National Laboratories	418
10.	Pilot Plants	184
11.	Research Schemes, Scholarships and Fellowships	1
12.	Industrial Research Association	48
13.	Residential Buildings	78
14.	Others	19
	total 2—*Council of Scientific and Industrial Research*	**748**[1]
	Ministry of Education and Youth Services (Scientific Surveys and Development Division)	
15.	Survey of India	115
16.	Botanical Survey of India	6
17.	Zoological Survey of India	6
18.	Anthropological Survey of India	4
19.	National Atlas Organisation	2
20.	Scientific Societies and Institutions and grans for scientific research	39
21.	National Research Development Corporation	12
	total 3—*Ministry of Education and Youth Services (Scientific Surveys and Development Division)*	**184**[2]
	grand total	**2259**

[1]In addition there is outlay of Rs. 102 lakhs to be met from internal resources.
[2]In addition there is capital outlay of Rs. 48 lakhs on public works.

APPENDIX

LIST X

Health Programmes for 1970-71—*Centre*

(Rs. lakhs)

s.no.	head of Development/Scheme	Outlay 1970-71
(0)	(1)	(2)
	Medical Education and Training	
1.	National Medical Library	4.00
2.	Kalavati Saran Children Hospital, New Delhi	2.00
3.	Lady Hardinge Medical College and Hospital, New Delhi	10.00
4.	construction works in the Lady Hardinge Medical College and Hospital, New Delhi	13.57
5.	Kasturba Health Society, Sevagram for starting a medical college at Sevagram	10.00
6.	All India Institute of Medical Sciences, New Delhi	60.81
7.	Vallabh Bhai Patel Chest Institute, New Delhi	5.00
8.	All India Mental Health Institute, Bangalore	3.50
9.	stipends to post-graduate students in medicine and surgery	20.00
10.	Post-graduate Institute of Medical Education and Research, Chandigarh	49.00
11.	Jawaharlal Institute for Post-Graduate Medical Education and Research, Pondicherry	20.00
12.	National Institute of Health Administration and Education, Delhi	12.44
13.	training centre for integrated course of nursing and public health and scholarship for nursing education, Master of Nursing, Post-Certificate, B.Sc Nursing and Diploma	24.30
14.	assistance to private medical colleges	10.00
15.	training and research in medical statistics	0.37
16.	training programme at Model Vital and Health Statistics Unit, Nagpur	0.38
17.	child welfare training centre	0.25
	total	**245.62**
	Medical Research	
18.	medical research (ICMR)	175.00

LIST X—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
	Medical Care	
19.	extension of CGHS scheme to Bombay	13.32
20.	extension of CGHS scheme to other cities	5.00
21.	extension of CGHS scheme to Uttar Pradesh	8.00
22.	Mental Hospital (HMD-Ranchi)	2.31
23.	All India Institute of Hearing and Speech, Mysore	7.84
24.	grants to Cancer Research Centres	7.50
25.	All India Institute of Physical Medicine and Rehabilitation, Bombay	2.57
26.	Grant-in-aid to voluntary organisations	55.00
27.	rehabilitation centre, Safdar Jang Hospital, New Delhi	3.34
28.	supply of anti-TB drugs to voluntary TB institutions	15.00
	total	**119.88**
	Control of Communicable Diseases	
29.	national filaria control programme	0.90
30.	national small-pox vaccine unit, NICD	1.54
31.	regional central cholera control unit	0.17
32.	cholera control programme (for educational material)	0.50
33.	national trachoma control programme (for educational materials)	0.75
34.	establishment of regional TB centre—Northern and Southern	1.00
	total	**4.86**
	Other Programmes	
35.	goitre control scheme	5.50
36.	pilot project in feasibility of vitamins and minerals fortifications of staple foods	0.50
	Central Institutes	
37.	All India Institute of Hygiene and Public Health, Calcutta	1.53
38.	National Institute of Communicable Diseases, Delhi	5.00
39.	establishment of Neuro-Virulence Testing unit, NICD	2.32
40.	establishment of virology Division, NICD	0.50
41.	Central Research Institute, Kasauli	5.00
42.	Central Leprosy Training and Research Institute, Chingleput	1.00
43.	expansion of BCG vaccine laboratory, Guindy	2.50

LIST X—*Contd.*

(Rs. lakhs)

(0)	(1)	(2)
44.	Central Drug Laboratory	1.15
45.	Drug Technical Advisory Board	7.69
46.	prevention of food adulteration	0.73
47.	Central Food Laboratory, Calcutta	1.01
48.	Central Health Education Bureau	1.68
	total	36.11
	Indigenous Systems of Medicine	
49.	development of ayurvedic, unani, homoeopathic and nature cure systems	100.00
50.	Jawaharlal Nehru Ayurvedic Medicinal Plants Garden and Harbarium, Poona	1.21
51.	Pharmacepecial Committee on ISM including homoeopathy	0.61
	total	101.82
	Miscellaneous	
52.	construction of buildings in Delhi and other places	57.76
	grand total	**741.05**

APPENDIX

LIST XI

Family Planning Schemes—Centre

(Rs. lakhs)

sl. no.	scheme	Outlay 1970-71
(0)	(1)	(2)
1.	service and supplies	203.83
2.	training programmes	48.41
3.	mass education	136.88
4.	research	141.06
5.	technical advice and supervision	48.11
6.	Hindusthan Latex Ltd. (including purchase of shares and loans)	3.00
	total	**581.29**

APPENDIX

LIST XII

Housing, Urban Development Water Supply Programme for 1970-71—*Centre*

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
	Housing Schemes	
1.	dock labour housing	25.00
2.	integrated subsidised housing scheme for industrial workers and economically weaker sections of community (grants to employers)	2.31
3.	improvement of statistics of employment of skilled workers in building construction	0.30
4.	Central Housing and urban development finance Corporation	200.00
5.	general pool residential and office buildings	653.11
6.	housing statistics, experimental housing and research and survey schemes (National Bldgs. Orgn.)	13.35
7.	setting up of cellular concrete plant at Ennore (Tamil Nadu)	40.00
	total—housing schemes	**934.07**
	Urban Development	
8.	research and training centre, Indian Institute of Public Admn. and regional training centres for training of municipal employees	5.76
9.	central cell	0.40
10.	inter-state regional development plans	7.00
11.	reviewing of matter plan for Delhi	1.00
12.	urban research	1.00
13.	assistance to private bodies for lok karya kshetra—urban areas	0.01
14.	regional survey of the Damodar Valley Area	1.04
	total	**16.21**
	Water Supply	
15.	training in public health engineering	2.65
16.	Central Water Pollution Prevention Board	0.50
	total	**3.15**

APPENDIX

LIST XIII

Social Welfare programmes for 1970-71—*Centre*

(Rs. lakhs)

sl. no.	head of development/scheme	outlay 1970-71
(0)	(1)	(2)
1.	family and child welfare	160.00
2.	assistance to voluntary organisations and other programmes of the Central Social Welfare Board	115.04
3.	nutrition programme for pre-school children	20.00
	Welfare of the physically handicapped	
4.	integrated education for blind children	0.10
5.	school for partially deaf	0.62
6.	training centre for the adult blind/deaf	2.00
7.	training teachers of physically handicapped	1.00
8.	scholarships to the blind, the deaf and the orthopaedically handicapped students	7.28
9.	voluntary organisations for the welfare of the handicapped	7.50
10.	others	0.61
	total	**19.11**
11.	education for prohibition	2.00
12.	rehabilitation	11.00
13.	Central Institute of Research and Training in public Co-operation	2.51
14.	research, training and administration	6.00
15.	strengthening of all-India voluntary organisations	3.00
16.	social and moral hygiene programmes	1.64
17.	pre-vocational training scheme (regional centres)	3.98
	total	**344.28**

APPENDIX

LIST XIV

Labour Welfare and Craftsmen Training Schemes for 1970-71—*Centre*

(Rs. lakhs)

sl. no	head of development	outlay 1970-71
(0)	(1)	(2)
	Labour Ministry	
1.	central and regional labour institutes	8.10
2.	National Safety Council	1.00
3.	mine safety programme	1.00
4.	programmes of Chief Labour Commissioner's Office	4.50
5.	workers' education	10.00
6.	programme of agricultural labour	1.32
7.	unemployment insurance	0.05
8.	Labour Bureau's schemes	16.97
	total	**42.94**
	Director General of Employment and Training	
9.	Central Staff Training and Research Institute, Calcutta	13.63
10.	Foremen Training Institute, Bangalore	9.28
11.	Advanced Training Institute, Madras	6.36
12.	central training institutes for instructors	2.23
13.	mine mechanisation training institutes	0.55
14.	all-India skills competition	0.72
15.	progressive trade tests	1.09
16.	material and equipment under US-Aid	0.20
17.	supervisory training schemes	0.50
18.	national apprenticeships scheme	39.25
19.	basic training facilities in non-ITI trades in the existing central training institutes including provision of hostel accommodation	6.00
20.	all-India trade tests for apprentices	0.56
21.	local cost of foreign experts	6.55
22.	central institute for research and training in employment service	0.46
23.	occupational information, employment counselling and studies	4.59
24.	vocational rehabilitation centres	0.33
25.	scheme for training in the maintenance of agricultural implements in rural areas	1.00
	total	**93.30**
26.	construction of buildings, etc.	36.33
	Grand total	**172.57**

LIST XV

List of important projects under Irrigation, Power and Industry during 1970-71—States and Union Territories

sl. no.	name of the project	state/union territory
(0)	(1)	(2)
	Irrigation	
1.	Kadam	Andhra Pradesh
2.	Tungabhadra Low Level Canal	Do
3.	Nagarjunasagar	Do
4.	Tungabhadra High Level Canal (Stage I)	Do
5.	Pochampad	Do
6.	Tungabhadra High Level Canal (Stage II)	Do
7.	Kosi	Bihar
8.	Gandak	Do
9.	Sone Barrage, Link Canals and remodelling works	Do
10.	Sone High Level Canals	Do
11.	Rajpur Canal	Do
12.	Western Kosi Canal	Do
13.	Chandan Reservoir	Do
14.	Mahi (Stage I)	Gujarat
15.	Mahi Stage II (Kadana)	Do
16.	Kakrapar	Do
17.	Ukai (Irrigation)	Do
18.	Narmada	Do
19.	Beas Unit I	Haryana
20.	Beas Unit II	Do
21.	Gurgaon Canal	Do
22.	W.J.C. (Remodelling)	Do
23.	Periyar Valley	Kerala
24.	Pamba	Do
25.	Kuttiadi	Do
26.	Kallada	Do
27.	Chambal Stage I	Madhya Pradesh
28.	Chambal Stage II (Rana Pratap Sagar)	Do
29.	Tawa	Do
30.	Barna	Do

LIST XV—*Contd.*

(0)	(1)	(2)
31.	Hasdeo	Madhya Pradesh
32.	Girna	Maharashtra
33.	Khadakwasla (Stage I)	Do
34.	Vir Dam	Do
35.	Mula	Do
36.	Bagh	Do
37.	Itiadoh	Do
38.	Bhima	Do
39.	Krishna	Do
40.	Warna	Do
41.	Jaikwadi (Stage I)	Do
42.	Upper Godavari	Do
43.	Pus	Do
44.	Kukadi Stage I	Do
45.	Upper Tapi	Do
46.	Tungabhadra	Mysore
47.	Bhadra Reservoir	Do
48.	Ghataprabha (Stage I)	Do
49.	Tungabhadra High Level Canal (Stage I)	Do
50.	Tungabhadra High Level Canal (Stage II)	Do
51.	Ghataprabha (Stage II)	Do
52.	Malaprabha	Do
53.	Hirakud (Stage I)	Orissa
54.	Mahanadi Delta	Do
55.	Beas Unit I	Punjab
56.	Beas Unit II	Do
57.	Beas Unit III	Rajasthan
58.	Bhakra	Do
59.	Chambal Stage I	Do
60.	Chambal Stage II (Rana Pratap Sagar)	Do
61.	Rajasthan Canal	Do
62.	Gurgaon Canal	Do
63.	Parambikulam Aliyar	Tamil Nadu
64.	Chittar Pattanamkal	Do
65.	Ram Ganga	Uttar Pradesh
66.	Gandak Canal	Do
67.	Improvement to Lower Sarda Canal System	Do

LIST XV—*Contd.*

(0)	(1)	(2)
68.	Mayurakshi Reservoir	West Bengal
69.	Kangasabati Reservoir	Do
70.	D.V.C. (Irrigation)	Do
	Power	
71.	Balimela Dam	Andhra Pradesh
72.	Srisailam H.E. Scheme	Do
73.	Lower Sileru H.E. Scheme	Do
74.	Ramagundem Thermal Station	Do
75.	Kothagudem 'T' III Stage	Do
76.	Umiam H.E. Scheme, Stage II	Assam
77.	Gauhati Thermal Station	Do
78.	Namrup Thermal Station	Do
79.	Gauhati gas turbine	Do
80.	Garo Hills (Tura) thermal Stn.	Do
81.	Namrup Thermal Station extn.	Do
82.	Barauni Thermal Station	Bihar
83.	Pathratu Thermal Station	Do
84.	Kosi hydel station	Do
85.	Pathratu thermal station extension	Do
86.	Subernarokha H.E. Scheme	Do
87.	Thermal Scheme in Bihar*	Do
88.	Dhuvaran thermal station	Gujarat
89.	Ukai H.E. Scheme	Do
90.	Gas turbines	Do
91.	Beas Unit I (multipurpose) @	Haryana
92.	Beas Unit II (multipurpose) @	Do
93.	Bhakra Right Bank (multipurpose) @	Do
94.	55 MW thermal station	Do
95.	Chenani H.E. Scheme	Jammu & Kashmir
96.	Sumnbal H.E. Scheme	Do
97.	Lower Jehlum H.E. Scheme	Do
98.	Kuttiadi H.E. Scheme	Kerala
99.	Iddiki H.E. Scheme	Do
100.	Jawaharsagar H.E. Scheme@	Madhya Pradesh
101.	New Thermal Scheme*	Do
102.	Koyna H.E. Scheme, Stage III	Maharashtra

LIST XV—*Contd.*

(0)	(1)	(2)
103.	Vaitarna H.E. Scheme	Maharashtra
104.	Bhatgar and Vir H.E. Scheme	Do
105.	Koradi thermal (I and II units)	Do
106.	Purli thermal station	Do
107.	Nasik thermal station	Do
108.	New Hydro Thermal Scheme*	Do
109.	Sharavathy H.E. Scheme, Stage II	Mysore
110.	Sharavathy H.E. Scheme, Stage III	Do
111.	New Schemes*	Do
112.	Dzuza Hydel Scheme	Nagaland
113.	Balimela Dam and Power Station	Orissa
114.	Beas Unit I (multipurpose) @	Punjab
115.	Beas Unit II (multipurpose)	Do
116.	Bhakra Right Bank (multipurpose)	Do
117.	U.B.D.C. H.E. Scheme	Do
118.	Gurunanak thermal power station*	Do
119.	Beas Unit I (multipurpose) @	Rajasthan
120.	Beas Unit II (multipurpose) @	Do
121.	Bhakra Right Bank (multipurpose) @	Do
122.	Jawaharsagar H.E. Scheme @	Do
123.	Parambikulam Aliyar H.E. Scheme	Tamil Nadu
124.	Kodayar H.E. Scheme	Do
125.	Madras Plant Extn. (Basin Bridge)	Do
126.	Ennore thermal Power Station	Do
127.	Pandiyar Punna-Pusha	Do
128.	Ennore T. Power Station extn.	Do
129.	Kundah H.E. Scheme, IV	Do
130.	New Generation Scheme*	Do
131.	Yamuna H.E. Scheme Stage II	Uttar Pradesh
132.	Ramganga multipurpose project	Do
133.	Obra H.E. Scheme	Do
134.	Obra 'F' exten.	Do
135.	Harduaganj 'F' IV Stage	Do
136.	Yamuna Hydel Stage IV, Part I	Do
137.	Maneri Bhali H.E. Scheme, Stage I	Do
138.	Thermal Scheme*	Do
139.	Santaldih	West Bengal

LIST XV—*Concld.*

(0)	(1)	(2)
140.	Little Ranjit	West Bengal
141.	Jaldhka	Do
142.	Indraprashta Power Station extn. (55 MW set)	Delhi
143.	Giri Bata H.E. Scheme	Himachal Pradesh
144.	Uhl Extn. (Bassi) H.E. Scheme	Do
145.	Gumti	Tripura
146.	Leimakhong H.E. Scheme	Manipur
	Industry	
147.	Expansion of Cheerapaunji Factory	Assam
148.	Continuous Casting Plant	Tamil Nadu
149.	Sugar Factory	Nagaland
150.	Dalla Cement Factory	Uttar Pradesh

@Inter-State projects.

*New Schemes.

MGIPCBE—83—3 PC/ND/70—9-3-71—3,500.